

Scottish Substance Misuse Service Providers' and Service Users' Attitudes on
Contingency Management: A Comparison with United States and Australian
Service Providers.

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Declaration

I, Lyndsey Alexandra McNair, declare that this thesis was written by me and that I conducted the work detailed herein. The work has not been submitted for, or accepted in, any previous degree.

Lyndsey Alexandra McNair
2010

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Declaration of own work

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WORD COUNT: 32,379

ABSTRACT

Background: Substance misuse in Scotland is increasing and with the price of illicit drugs decreasing, this makes experimentation more attractive and affordable. This has led to a need for services to expand approaches designed to tackle substance misuse. Psychosocial interventions, particularly those based on behavioural approaches, are thought to be a useful adjunct to pharmacological approaches. One intervention, with a strong evidence base is Contingency Management (CM) however it is poorly implemented in services. Research in the United States and Australia indicate that one of the main barriers to implementation is the beliefs and views of service providers on the principles and practices of CM.

Aims: To explore the views of service providers in the statutory and voluntary /community sectors on CM and to gain an insight into service users' views of CM. The study looked at comparing Scottish service providers' views of CM against those of the American (Kirby *et al.*, 2006) and Australian (Ritter and Cameron, 2007) samples.

Design and Method: The study adopted both a quantitative and qualitative approach. Service providers' views on CM were gathered using the Provider Survey of Incentives (PSI) questionnaire and service users' views on CM were gathered via a qualitative focus group and analysed through a General Inductive Approach. PSI questionnaires were sent out to statutory (n=48) and voluntary/community agencies (n=22) working with individuals, currently or previously using substances. The focus group comprised members of a service-user involvement group from the Scottish Drug's Forum (SDF). Participants were both male (n=7) and female (n=2) and at varying stages of abstinence. The process of analysis involved generating codes from the thematic content of the data, to produce overall themes that arose from the group.

Results & Conclusions: Quantitative analysis involved carrying out mixed model ANOVAs to determine if there were differences between statutory and voluntary responses to unique tangible and social items and overall tangible and social incentives. In keeping with the analysis of the comparison papers, frequency results are reported for responses to the parallel tangible and social items and compared against responses from published data from the United States and Australia. The qualitative process of analysis involved generating codes from the thematic content of the data, to produce overall themes that arose from the focus group. Overall, the Scottish sample showed less concern regarding CM approaches than the Australian sample, but more concern than the American sample. The main concern in the Scottish, American and Australian samples was that incentive programmes do not address the underlying causes of addiction. This was also highlighted by service users, who felt that incentive programmes do not address the other needs of the individual. It was also found that issues service providers felt were not problematic were raised as particular concerns by service users, such as the artificial nature of social praise and the potential for tangible incentives to be sold. It was concluded that it would be beneficial for service providers to collect the views of service users, should they wish to implement CM approaches.

“For them to perceive the advantage of defeating the enemy, they must also have their rewards.” Sun Tzu (500 B.C.)

1. INTRODUCTION

1.1 Overview of Substance Misuse

According to the 2003 US National Survey on Drug Use and Health, an estimated 3.7 million people have used heroin at some point in their lives, with over 119,000 reporting use within the month preceding the survey (US Department of Health and Human Services, 2005) and in 2006, 23.6 million people aged 12 or older needed treatment for substance misuse problems (US Department of Health and Human Services, 2008).

In Australia, a 2004 survey by the Australian Institute of Health and Welfare (AIHW) reported that 38% of the population aged 14 years and over had used illicit drugs¹ and 15% of these had used them in the month prior to the survey (AIHW, 2007). The survey also found that in 2005, 39,000 patients were receiving pharmacological treatment for drug addiction, with 75% of these being methadone prescriptions. Meanwhile 46% of injecting heroin users admitted they have overdosed at some point in their life (AIHW, 2007).

European figures for those using cocaine indicate that 3.6% of adults are continuing users, which is approximately 12 million people. Whilst in relation to problem opioid use, between one and six cases per 1000 of the adult population are continuing users, with heroin being the principal drug of use in 50% of all drug treatment requests (European Centre for Drugs and Drug Addiction, 2008). It was also reported that of all deaths in Europe between 2005 and 2006, drug related incidents accounted for

¹ The statistics mentioned refer to illicit drug taking by individuals using different types of substances, including opioids, stimulants, hallucinogens and cannabinoids. However the current research mainly focuses on the literature surrounding opioid dependence, namely heroin, as this is the main area of research in Contingency Management.

3.5% of the total, with opioid use being a reported factor in 70% of these deaths (European Centre for Drugs and Drug Addiction, 2008).

In 2007 to 2008, 12,562 new individuals were reported to the Scottish Drug Misuse database (SDMD). This corresponds to a rate of 259 per 100,000 of the Scottish population. Of those reporting illicit drug use, 69% (7,047 individuals) reported using mainly heroin (NHS National Statistics, 2008).

With substances such as heroin decreasing in price, it makes experimentation a more attractive option for young people (US Department of Health and Human Services, 2005) and this has led to a need for treatment services to expand approaches designed to tackle illicit substance misuse (McLellan *et al.*, 1993).

The current treatment model for substance dependency tends to follow the pharmacological approach, based on the medical model of dependence (Stitzer & Walsh, 1997). This mainly focuses on implementing an opiate substitute, such as methadone, used either as a long-term maintenance approach or as a withdrawal based treatment, where the methadone is administered over time in decreasing doses, until the patient is no longer dependent (Faggiano *et al.*, 2009). Although there are a number of positives to pharmacological treatment models; such as increased life expectancy, diminished drug use, reduction in transmittable diseases and reduction in drug-related crime (Marsch, 1998) there are a number of challenges facing a purely pharmacological approach. It is evidenced that using only opiate substitution therapy enables patients to continue illicit drug use and has no effect on relapse rates once detoxification is completed (Carroll *et al.*, 2001).

Research has shown that the introduction of psychological therapies can have a significant positive effect on a patient's continuing substance misuse: encouraging a reduction in use or total abstinence and can also have an effect across a broad range of functioning, such as physical and mental health and relationships (Wanigarante *et al.*, 2005). McLellan *et al.* (1993) found that opioid substitution

therapies were effective in the treatment of those addicted to heroin, however the individual's outcomes were improved when their pharmacological treatments were provided in conjunction with a behavioural intervention.

By combining pharmacological treatments with a psychosocial approach, there is an increased effect on reducing drug-using behaviours, as pharmacology reduces the physical withdrawal symptoms whilst the psychosocial aspects encourage engagement and retention in treatment and motivation to change existing drug habits (Stitzer & Walsh, 1997).

This indicates that focusing purely on pharmacological techniques fails to recognise a number of ongoing problem behaviours in treating drug using patients, such as engagement, retention and motivation. It is therefore necessary to look at treatments that focus not only on the pharmacological addiction, but that look at the underlying behavioural response to drug use (Marlatt & Gordon, 1985).

1.2 Literature Search Strategy

A rigorous search strategy was employed to identify both national and international research and theoretical literature related to the topic of substance abuse treatments. A search of Medline, Cinahl, Embase, Psycinfo, Psychlit and The Cochrane Centre for Reviews and Dissemination databases was carried out. The search was undertaken using the following list of keywords, "Contingency Management", "substance abuse treatment", "addiction treatment", "methadone maintenance", "treatment provider survey", "practitioner attitudes", "statutory and voluntary addiction services", "positive reinforcement", "token economies", "incentives", "vouchers", "treatment compliance", "community reinforcement approach" and "motivational interviewing." For consistency of approach, the keywords used were the same as those identified in Kirby *et al.* (2006) and Ritter and Cameron (2007), whose results are used in the research for comparison of attitudes of Scottish, American and Australian service providers, to ensure interrogation of the same elements of the literature in the field. Although a large number of hits were identified, attention was focussed on those sources relating to

perceptions of staff attitudes towards addiction clients, Contingency Management, voucher incentives and other forms of drug abuse treatment.

1.3 Psychosocial Treatment Approaches in the Substance Misuse Field

A number of psychosocial approaches have emerged in the treatment of substance misuse that focus on understanding the underlying causes of addiction and implementing positive strategies for self-management. These have included Motivational Interviewing (MI) (Miller & Rollnick, 1991), family-based interventions (Keen *et al.*, 2000), Community Reinforcement Approaches (CRA) (Hunt & Azrin, 1973) and Cognitive-Behavioural Therapy (CBT) (Dziedzic *et al.*, 1998).

1.3.1 Motivational Interviewing (MI)

MI is a patient-centred style of directive counselling that focuses on increasing motivation to change maladaptive behaviours by enabling the patient to investigate, understand and resolve their ambivalence (Miller & Rollnick, 2002).

MI as a psychosocial intervention has been well researched. Booth *et al.* (1998) looked at improving access to services by allocating drug users, who were currently not accessing services for help with their addiction, to one of four treatment conditions: MI only, risk reduction only; focussing on safer injecting strategies, MI with free treatment or risk reduction with free treatment. It was found that there were no significant differences in treatment uptake between MI and risk reduction groups, however access to free treatments compared to treatments that required payment from patients were seen to be more effective at encouraging access to services. One limitation to the study, that may explain the limited success of MI, is that participants were not matched for stage at which patients were ready to change their behaviours. As described by Miller and Rollnick (1991), MI assumes that individuals will be at different stages of change and the focus of the intervention is to work with the person's ambivalence about making changes. It is therefore necessary to match strategies to the stage of change to reduce resistance from the individual in accessing interventions.

In a meta-analytic review of MI, Ruback *et al.* (2005) found that of the 72 studies identified, 47 of these were investigations of MI within the addictions field. Furthermore, of these 47 studies, it was highlighted that MI “outperformed traditional advice giving in 75% (35/47) of these...” (p.308). They concluded that a review of these studies indicated that MI can have a significant effect on a number of different areas of intervention, in particular adherence to prescribed medications, such as methadone and changes in lifestyle choices of patients.

A further meta-analytic review by Burke *et al.* (2004) looked at evidence for the efficacy and the sustained efficacy of MI approaches: ability to provide long-term changes rather than a short-term initial response (Burke *et al.*, 2004). This review also found that MI approaches were at least as effective as other treatments utilised in the field of addictions. In relation to sustained efficacy, the review found that the effects of MI appeared to be sustained at follow-up, even up to 4 years following intervention. In comparison to no treatment MI was shown to sustain improvements in 51% of patients on follow-up, whilst only 37% of patients who received no input sustained comparable improvements.

1.3.2 Family-Based Interventions

There has been much research carried out looking at the adverse effects of parental drug use on children (Keen *et al.*, 2000). It has been shown that children of drug addicted parents are more likely to suffer abuse and neglect (Wolock & Magura, 1996) and require input from services for behavioural problems (Soeptami, 1994).

Keen *et al.* (2000) looked at family based interventions which focussed on parental withdrawal from heroin via a methadone programme. Alongside this opiate substitution therapy, the family based intervention looked at helping individuals to tackle issues of childcare and develop parenting skills through group-work sessions. They found that the support of the family based intervention was beneficial in helping drug using parents to achieve abstinence whilst attending the programme. Furthermore, after the completion of the intervention, parents who successfully completed the

programme were able to take their children home, despite the fact that five of them had been on an at risk register and a further four had not been in the custody of their parents prior to the commencement of the intervention. However, although the results of the study seem impressive, due to a lack of follow-up data, there is no method of assessing whether benefits of family based interventions are sustainable long-term.

More recently the sustained efficacy of family-based interventions for adolescents with substance misuse problems was studied by Liddle *et al.* (2008). This study looked at the differences in a family-based intervention, Multidimensional Family Therapy (MDFT) and individual cognitive-behavioural therapy (CBT): a short-term structured therapy that focuses on helping individual's current problems by looking at dysfunctional thoughts and maladaptive behaviours (Beck, 1976). It was hypothesised that MDFT would have more durable efficacy, as it focussed on the interactional changes between the adolescent, their family, parents and their social environment. It was found that although there were no observable differences in retention to treatment or number of sessions required in each group, that the MDFT group had made improvements on 12 month follow up. Those in the MDFT group showed a 77% decrease in frequency of drug use, compared to those in the CBT group who showed an increase in drug use at follow up. Furthermore, 64% of adolescents in the MDFT were shown to be abstinent at follow up, compared to only 44% in the CBT group. It was concluded that family-based approaches are beneficial in the treatment of drug users, in particular with the adolescent population.

1.3.3 Community Reinforcement Approach (CRA)

CRA is an approach that looks at the lifestyle choices of those misusing substances, by acknowledging the impact that environmental influences have on maintaining drug use habits (Roozen *et al.*, 2004). The main aim of CRA is to focus on more positive environmental influences utilising social, familial, vocational and recreational approaches to help clients achieve abstinence (Hunt & Azrin, 1973) through the formation of rewarding activities that are incompatible with continued drug use. The CRA approach assumes that the development of these adaptive activities

initiates the desire for and maintenance of abstinence from illicit substances (Schottenfeld *et al.*, 2000) by providing a lifestyle that is more rewarding than using substances.

Although there has been much research carried out on CRA approaches (Hunt & Azrin, 1973; Azrin, 1976; Budney & Higgins, 1998) it appears to have lost favour and is not widely implemented (Kadden, 2001). Barber (1992) suggests that one possible reason that CRA is not more widely adopted is the fact the approach demands a lot of time from staff to carry out effectively and that many services cannot afford the high costs associated with implementing the principles.

A systematic review of CRA by Roozen *et al.* (2004) concluded that there was only “moderate evidence for the efficacy of CRA...in various substance-related disorders, including alcohol, cocaine and heroin” (p.9).

1.3.4 Cognitive-Behavioural Therapy (CBT)

As previously described, CBT is a short-term structured therapy that focuses on helping individuals current problems by looking at dysfunctional thoughts and maladaptive behaviours (Beck, 1976). CBT in the substance misuse field focuses on explaining addictive behaviours as maladaptive strategies for dealing with the stresses placed on the individual. The main aim of the approach is to enable the person to develop more adaptive ways of dealing with the stresses they face rather than using substances as a way to cope. This is achieved by using a variety of techniques such as modelling of adaptive behaviours, restructuring dysfunctional cognitions and behavioural experiments (Beck, 1976).

The use of CBT in treating substance use disorders has been proven to be effective both during the intervention and following the treatment process. Carroll *et al.* (1994) found that a CBT approach was effective in treating individuals with cocaine dependence to reduce their intake over a 1 year period and that on follow up, those receiving CBT input had continued to make more effective changes and

maintained their abstinence, more so than during their treatment phase, than control participants who did not receive CBT input.

In comparing the effects of psychosocial interventions against a purely pharmacological approach, Dzialdowski *et al.* (1998) designed a treatment package for heroin users utilising a CBT approach alongside opiate substitution therapy. The main aims of the study were to increase patient engagement with substitution therapy and to reduce co-morbid symptoms such as depression. Participants were randomly allocated to receive either substitution therapy with CBT or substitution therapy with standard counselling. At the end of the trial it was found that participants in the group receiving CBT input described experiencing fewer symptoms of depression, however there appeared to be no difference in rates of engagement between the groups. It was concluded that CBT approaches may be useful in helping heroin users deal with the related problems of their substance use once they are attending an opiate substitution programme.

In looking at the effectiveness of CBT, Rawson *et al.* (2002) utilised two different behavioural approaches by allocating participants, who had been enrolled in a methadone programme for at least 90 days and had tested positive for cocaine use in the prior month, to either a CBT group or a group utilising monetary incentives. They also looked at the use of each intervention alone and in combination, hypothesising that during treatment, monetary incentives would encourage a more substantial reduction in drug use, whilst at follow up, CBT would provide a more sustainable reduction. This was the findings of Kellogg *et al.* (2005) who state that incentives should be considered a useful adjunct to treatment but should not replace formalised talking therapies such as CBT. Rawson *et al.* (2002) reported that during treatment, those in the incentive group were found to produce significantly fewer drug positive urine samples, whilst at 26 and 52 week follow-ups, there appeared to be an improvement in the CBT group. They concluded that the positive reinforcement of providing incentives allowed for “an immediate and profound suppression” of drug use, whilst the benefits of the CBT approach exhibited more pronounced improvements during the follow-up phase of treatment. This was thought to be due to the fact that skills learnt in session were being put to use in daily life throughout the post-treatment period. However, one drawback to these results is that

there is no published information on the participants' drug use history, rate of cocaine use or previous periods of abstinence, all of which may have impacted upon their follow-up findings.

One negative aspect of this study was that to encourage participants to enter the trials, investigators reduced monthly methadone fees by \$40 throughout the study time period, which in itself is an incentive for participants to comply with treatment parameters whether they were allocated to a monetary incentive group or not. However, the study highlighted that the use of behavioural approaches in treating substance misuse problems has benefits for individuals during and after treatment.

1.4 Behaviour Modification Based Psychosocial Treatments

Among those who do seek treatment, there remain a number of common problems, such as: early treatment termination, continued drug use and relapse back to drug use following the end of input. One strong need in the area of substance use disorders is the development of interventions that provide the individual with the concept of "motivation to change"; reasons that the individual expresses as being both important to necessitate changing habits and that they feel confident about being able to change (Miller & Rollnick, 1991).

Research has confirmed that self-administration of drugs can be increased or decreased by the same outcomes that influence other behavioural interactions (Higgins *et al.*, 2008). In substance abuse treatment, behavioural strategies are based on the principles of operant conditioning, a psychological theory which suggests that all behaviours are maintained by contextual influences and that change can be brought about by altering the consequences of these influences (Skinner, 1969). Utilising this within the substance misuse field involves building up the relationship between the individual's response and a positive reinforcer to provide the person with a motivation to change. Therefore, when the individual completes a desired response, such as clean urine samples or attendance at groups, they are provided with an incentive, such as a monetary reward, which makes them more likely to want to continue with this new desired behaviour.

The principles of conditioning, in explaining maintenance of drug use, were studied by Deneau *et al.* (1969) who identified that the most commonly abused street drugs, i.e. opioids, such as heroin; stimulants, such as cocaine and amphetamines, such as "speed", served as positive reinforcers in laboratory monkeys, i.e. the monkeys were able to learn operant responses, such as pressing a lever or pulling a chain, when the only consequence was an injection of amphetamine, cocaine or morphine. When these drugs were substituted with a less commonly abused one, such as antipsychotic medication, the animals discontinued pressing their levers or pulling the chains as they received no positive reinforcement for ingesting these drugs. Aigner and Balster (1978) also identified that rhesus monkeys, who were given an unlimited supply of cocaine by pressing a lever, therefore a continuous schedule of reinforcement, would voluntarily ingest drugs and engage in repeated use, resulting in serious negative consequences. For example, if given free access to cocaine, the monkeys would consume large enough doses to overdose and would refuse food and water in favour of continuous drug use, up to the point that they would allow themselves to die without the researcher intervening. It was thought that behaviourally the monkeys were conditioned to respond to a previously neutral environmental stimulus, in this instance the lever, which then became an "occasion setter" for drug cravings and continuous drug using behaviour, meaning that they would forego long-term consequences, such as the results of lack of food and water, in favour of the short-term satisfaction of gaining the desired drug (Aigner & Balster, 1978).

Early studies looking at modifying operant responses to substances in humans have also been carried out with alcoholics in a residential treatment setting. Bigelow *et al.* (1975) studied patients who were given placements in a residential hospital, where they were permitted to continue drinking alcohol under monitored conditions. It was found that abstinence from alcohol increased when access to an alternative reinforcer was introduced, such as an enriched environment, or being given a monetary reinforcement contingent upon abstinence. However, criticisms to this study include, the use of an artificial setting, in which patients are automatically provided with an enriched environment and do not have to access such reinforcers for themselves and also the lack of follow-up information on patient abstinence following their release from the residential setting.

This suggests that like many forms of operant conditioning, drug use, even amongst highly dependent individuals, is flexible and sensitive to changes in the environment, which may increase the chances of service users accessing treatments and staying on programmes, such as Methadone Maintenance Treatment (MMT). This is something which has been highlighted by the National Treatment Agency for Substance Misuse (NTA) (2006) who stated that there is a need to improve the effectiveness of drug treatment systems, including "improving interventions to reduce the risk of blood borne viruses...risk of overdose...improve engagement and retention in drug treatment" (p.9). Using a psychosocial behavioural model based on conditioning may be one way to tackle this need for service improvement.

1.4.1 Token Economies in Behavioural Treatment Approaches

In 1859 Avendaño y Carderera studied behavioural conditioning in children within the classroom setting. He described rewarding the good behaviour of children with a ticket that they could redeem for prizes, such as toys. This highlights that the system of token reinforcement has been used effectively as a therapeutic method for some time.

Incentive based treatment approaches within the substance abuse field arose from work carried out looking at incentives as a way to modify the behaviour of individuals with learning disabilities and those exhibiting aggressive behaviour (Bellus *et al.*, 1999; LePage *et al.*, 2003; Matson & Boisjoli, 2009). These "token economies", as described by Ayllon and Azrin (1968), play an important part in behaviour modification history as one of the first systems to employ monetary rewards as reinforcers for good behaviour. As described by Paul and Lentz (1977) this behavioural treatment mainly focuses on using the Social Learning Approach (SLA). SLA techniques help individuals develop skills that they have lost or have never developed, to succeed in realising their goals, by systematically providing social or tangible reinforcement of positive, adaptive behaviours rather than maladaptive ones.

Token economies were once a common treatment approach in many public sector psychiatric hospitals, but in recent years have lost favour, largely due to perceptions of staff that they are open to abuse, impractical and too costly to implement (Glynn, 1990) or due to “social norms and trends in treatment research” (Matson & Boisjoli, 2009, p.244). However, despite these perceived shortcomings, there are a number of studies within psychiatric settings that have demonstrated the effectiveness of token economies in altering undesirable behaviours, such as reducing aggressive outbursts in patients with chronic psychiatric problems and increasing more desirable skills, such as activities of daily living (Rimmerman *et al.*, 1991; Dickerson *et al.*, 1994).

Le Page *et al.* (2003) carried out a similar long-term follow-up study of patients in an adult psychiatric unit; comprising individuals with severe mental illness, personality disorders and comorbid mental health and substance use difficulties, assessing the rate of assaults on staff, patients and self injuries, 12 months prior to the implementation of a token economy scheme and 24 months following the introduction of the approach. In this study, patients were given a stamp on a weekly sheet for behaviours that were viewed to be adaptive for remaining in the community, such as activities of daily living, or that helped to facilitate the individual’s care plan, such as attendance at anger management groups. The incentives themselves were off-grounds passes, opportunities to watch movies or go on shopping trips. Though relatively simple and cost-effective to implement, the study found that the introduction of token incentives significantly decreased the number of staff assaults and also decreased the loss of staff hours due to sick leave over the 2-year follow up period. Furthermore, they concluded that the introduction of such a behavioural approach involving the reinforcement of positive behaviours helped to reduce aggression generally amongst patients, as there was less opportunity for miscommunications between staff and clients and there was less confusion for both staff and patients regarding treatment models being used in the unit.

Within the substance misuse field Franco *et al.* (1995) utilised a token economy approach alongside a 12-step approach (Alcoholics Anonymous, 2002): a model whose principles are founded on open-mindedness, willingness and honesty from individuals with addictions and teaches individuals behavioural and cognitive patterns that are non-addictive (Finley, 2004), with patients who had both a

psychiatric diagnosis and substance misuse problems. The function of the token economy was to motivate patients to attend ward-based educational and skills training groups, utilise self-help and network with groups aimed at increasing socialising. They found that within a month of the token economy being implemented, violence on the ward had decreased and participation in therapeutic programmes doubled from the previous month.

More recently, researchers at the Massachusetts Institute of Technology (MIT) have used token incentives to encourage patients taking medication for the effects of Tuberculosis (TB) to comply with a lengthy drug regimen. Using a stamp-sized patch that changes colour in the presence of urine containing the TB medication, patients are provided with an incentive that is contingent to them having taken their medication, as a code on the patch appears that enables them to top-up their mobile phones with airtime, therefore providing further incentive to continue their medication regime until treatment is completed (The Economist, p.10, 2009). Research indicates that, although the token economies may have become a less popular approach (Glynn, 1990), they have “proven to be flexible and effective interventions...and worthy of the current day practitioner...” (Matson & Boisjoli, p.241, 2009).

1.4.2 Contingency Management Programmes in Behavioural Treatment Approaches

Contingency Management (CM) is a behaviourally-based psychosocial method for increasing a patient's motivation to change their current drug practices through the use of token incentives. CM approaches provide reinforcing consequences that are effective in prompting abstinence from drug use and can also be applied to prompt other desirable therapeutic behaviours, such as attendance at groups or blood borne virus testing (Higgins *et al.*, 2008).

Although little is known about CM interventions in a practical setting, it has been described as “an orderly set of procedures based on fundamental principles of behavioural science” and not a “bag of arbitrary tricks” (Higgins *et al.*, 2008, p.12). However to fully investigate whether or not these

practices can work in the clinical setting, it is beneficial to gain insight into how the principles underlying incentive based treatments work

CM interventions are based on the "law of effect" principle of operant conditioning, which states that if a response is followed by a reward, it is strengthened and is more likely to be carried out again. However, if a response is followed by no reward then the motivation to continue carrying out that response is weakened (Thorndike, 1911). CM involves the systematic application of strengthening positive responses, through the use of a reward system, for carrying out pre-negotiated positive behaviours. The aim of such conditioning is simply that successful positive responses, such as submitting a 'clean' urine sample, free of traces of illicit substances, or attendance at blood borne virus appointments, are preserved, whilst unsuccessful responses, such as failure to attend therapy sessions or polydrug use, using more than one type of substance at any given time, "die off" (Thorndike, 1911).

In CM, to ensure that the adaptive positive responses remain, the individual is rewarded with an incentive which can be either social or tangible. Hall (1971) defined social incentives as those that provide social recognition, e.g. printed certificates and verbal compliments, or special privileges, such as preferred methadone dispensing times, to clients who achieve their treatment goals. Tangible incentives are goods or services, e.g. gift vouchers or retail items, given to clients who exhibit an agreed upon behaviour, or achieve a pre-determined treatment goal.

In relation to voucher-based contingency management programmes, Higgins *et al.* (1993) first began experimenting with tangible reinforcers with patients abusing cocaine and opioids. These vouchers were redeemable for goods and services chosen by the patient, making them easier to tailor to individual preferences. Higgins *et al.* (2002) highlighted that the concept of voucher-based incentives was initially a new way of managing cocaine dependence when other psychosocial treatment methods were deemed ineffective. It was found that providing incentives allowed staff and patients to work towards pre-negotiated therapeutic targets and retained patients in treatment whilst they continued to collect their incentives.

As described by Higgins *et al.* (2008) CM interventions promote behaviour change through positive reinforcement, involving the delivery of a reinforcer, such as gift vouchers, contingent upon meeting a therapeutic goal (e.g. abstinence from recent drug use) and negative reinforcement, involving the removal or reduction of reinforcers, such as suspension of take-home privileges. CM interventions also utilise positive punishment, in which an aversive event, such as being socially reprimanded, is contingent upon the patient exhibiting a therapeutically undesirable response (e.g. failure to attend therapy sessions) and negative punishment, which involves the reduction of a positive event, such as removal of clinic privileges, when the patient exhibits an undesirable response (e.g. increasing drug use).

1.5 Effectiveness of Contingency Management in Substance Misuse

The use of contingencies has been in practice to some degree since the 1970's. Liebson *et al.* (1973) studied "take-homes", a privilege given to patients to take doses of methadone home instead of being dispensed daily at a clinic, as a reinforcer for achieving positive target behaviours. In 1978, Milby *et al.* studied urine-verified abstinence from substances, by randomly assigning 69 participants to either an abstinence-contingent take-home group (in which they were required to provide 7 consecutive negative urine samples) or a wait-list control condition. There were no differences in overall percentage of negative urine samples, but the contingent take-home group were found to produce more consecutive negative urines than did the control group.

However, Ball and Ross (1991) highlight that in most methadone substitution programmes, some patients will continue to use illegal substances. As such, CM approaches remain important for the advancement of clinical practice, even in a pharmacological treatment environment. In looking at increasing treatment compliance and retention, Higgins *et al.* (1991) compared voucher based incentives, coupled with a Community Reinforcement Approach (CRA) (Hunt & Azrin, 1973), against standard drug abuse counselling sessions. They found that 58% of those accessing the CRA and voucher incentive condition completed the recommended course of 24 weeks, whilst only 11% of those receiving standard drug abuse counselling completed the full course of treatment. Higgins *et al.*

(1994) further highlighted the efficacy of incentive-based treatments, by randomly assigning patients to either a CRA only group or a CRA with voucher incentives treatment group. They found that 75% of those in the CRA with voucher incentive group completed their recommended 24 weeks on an outpatient treatment programme, whilst only 40% from the CRA group completed the full 24 weeks. They suggest that this demonstrates that voucher incentives contribute to higher rates of treatment retention. They further found that 50% of those patients in the CRA and voucher incentive group were shown to have achieved 12 weeks of continuous cocaine abstinence, whilst 20% of those in the CRA only group were able to verify the same level of abstinence. Higgins *et al.* (1994) concluded that the results demonstrate the active contribution of contingent vouchers to the higher level of abstinence and retention in the treatment programme. They further found that on patient follow-ups, those who were assigned to the CRA with voucher incentive group continued to remain abstinent for an average of 12 weeks after the vouchers were discontinued. They concluded that the use of incentives is an effective method in maintaining abstinence even after patients have no further clinical input from services.

These CM principles were also investigated to identify the potential to enhance early engagement in treatment. Rowan-Szal *et al.* (1997) used a voucher-based incentive approach over a 3 month treatment period. They randomly allocated 46 patients to either a voucher reward group or a control group, at the beginning of their Methadone Maintenance Treatment (MMT). They found that at the end of the trial, those in the CM based voucher group had attended significantly more therapy sessions than those in the control group and that the CM based group had better treatment retention than the control.

Similar studies have looked at the potential for CM principles to be used to manage relapse prevention once patients are abstinent from drugs. Chutuape *et al.* (1999) allocated 14 heroin abusing patients, to either a control group or a reward based abstinence group. The patients were given the choice of reinforcer, either vouchers or take-home methadone doses. It was found that patients in the contingent reward group demonstrated lower rates of illicit drug use whilst on the MMT. The authors highlight that to maintain these results and reduce relapse, contingent rewards need to be kept in place

for a longer period of time, in conjunction with patients receiving input on other lifestyle changes to increase the number of natural reinforcers in their environment. This indicates that CM and CRA may be beneficial treatments which, in conjunction with each other, can focus on initially engaging the individual in services utilising reinforcement strategies and continue this process by helping the patient to value the natural reinforcers in their own environment.

Whilst incentives may help motivate abstinence, increase engagement and retention, there is still a need for developing reinforcers that are more individual to patients (Higgins *et al.*, 2008). The concept of rewarding target behaviours was also looked at in relation to “prize-based contingency management” by Petry and Martin (2002). This involved reinforcing patient behaviours with random prizes contingent upon meeting their targets, rather than existing gift vouchers. This approach, known as “the fishbowl,” allows patients to draw tokens from a bowl. The advantages of this method are that patients can, by chance, achieve a high-magnitude reinforcer early in treatment, prizes are visible and awarded on the spot and patients are motivated by seeing others win (Petry & Martin, 2002). Within the clinical setting, the main advantage to the prize-based approach is that abstinence from drug use is reinforced intermittently rather than continuously, as is done in the contingent voucher arrangement and has the potential to be less expensive for services than a continuous reinforcement scheme.

The schedule of reinforcement used to determine when a client’s response is rewarded plays a part in addressing the effectiveness of incentive-based approaches such as CM. Reinforcement schedules are a set of protocols which determine when a desired behaviour is reinforced through the introduction of a reward (Skinner, 1969), in the case of CM either a social or tangible incentive. These schedules range from continuous reinforcement, in which every positive response is rewarded, to extinction, in which no responses are rewarded and the behaviour dies off. In between these is an intermittent reinforcement schedule, in which only some responses are rewarded.

Skinner (1969) described different types of schedules that can be used in the process of reinforcing behaviours, including, Fixed Ratio (FR), Fixed Interval (FI) Variable Ratio (VR) and Variable Interval. In a FR schedule, a reinforcer is delivered every time a participant responds a specified

number of times. In this instance the participant knows how often they have to complete a desired response to gain a reward. In CM this may involve a reward being given, for example, after clients attend 3 therapy sessions and again after they attend another 3 sessions.

In a FI schedule, a reinforcer is delivered for the first response after a fixed length of time has passed since the last reinforcement. In CM this may involve the client being given a reward to reinforce handing in a clean urine sample each Monday morning, however they can only be given this reward once each week no matter how many clean samples they produce in the same week.

In a VR schedule, a reinforcer may or may not be delivered following the desired response, as achieving the reward is random. In this instance the participant has no idea whether or not they will receive their reward following their response. In CM this is seen in the prize-based approaches, in which clients are able to draw tickets which may or may not contain a tangible reward.

Finally, in a VI schedule, a reinforcer is provided following the first response after an average length of time has passed since the last reinforcement. In CM this may involve the client being reinforced on average once per week for achieving a desired behaviour, however this may happen on any day of the week, so that the client cannot predict when they will achieve their reward.

Through experimental work, Skinner (1969) theorised that variable as opposed to fixed schedules were more likely to increase the desired response in participants. It was also found that ratio schedules produced higher rates of response than interval schedules and had a greater resistance to extinction of desired response. It was believed that this may be due to the fact that in an irregular schedule, the delivery of a reinforcer cannot be predicted by the participant and so the absence of the reinforcer is less informative. Within approaches such as prize-based CM, which operate a variable ratio schedule, clients may continue to carry out a high rate of responding, despite the amount of times they may receive no tangible reward, yet they continue to predict that they can “win.” As described by Skinner (1969), this works on the same principle as a slot machine, in which, despite the number of

times a person responds by putting coins in and gains no reward, they will continue to put coins in, as the schedule reinforces the prediction that they are due to win a prize.

In a clinical trial of “prize-based” contingency management Petry and Martin (2002) targeted 42 patients who used both opiates and cocaine on MMT. They concluded that the prize procedure increased the rate of negative urine samples, particularly in patients who were mainly cocaine users, whilst encouraging motivation to change their concurrent polydrug use. Although implementation of prize and voucher-based incentives will cost more than current standard drug treatments (Petry & Simcic, 2002), the expected gains through reduction in methadone prescriptions and decreased need for continuing medical support for issues such as blood borne viruses, dental treatment or in-patient stays (Holder & Blose, 1991), will eventually offset this outlay and ultimately may reduce funding required to maintain community drug services. This would mean that treatment of drug use is viewed as a long-term treatment process, focussing on rehabilitation of the individual through long-term psychosocial interventions (O'Brien & McLellan, 1996).

Adaptations to CM approaches can be helpful in encouraging longer term positive behaviours related to helping patients make overall lifestyle changes (Petry & Simcic, 2002). Reinforcement through incentives has looked at encouraging patients to attend psychological therapy (Stevens-Simon *et al.*, 1997) and achieve pre-determined lifestyle goals (Petry *et al.*, 2000). For example, clients were asked to pick three specific goals per week in relation to their treatment plan; such as attending medical appointments, completing a social activity with their family or applying for college or job opportunities (Petry *et al.*, 2001). Patients who were able to prove they had completed their weekly goals; via receipts or appointment cards, received their voucher. It was estimated that this increased compliance rates for target activities from less than 30% to approximately 65% and that these effects were still demonstrated up to 7 weeks after treatment completion, with no reinforcement available (Petry *et al.*, 2001). Throughout the studies into CM it was found that it was useful in helping to engage clients in the treatment process, retain them in treatment and maintain positive behaviour changes after treatment termination. Studies looking at predictors of efficacy of CM programmes were carried out by Griffith *et al.* (2000) and Lussier *et al.* (2006), who found that CM principles were

most effective when the reinforcer was delivered immediately after the target response was achieved, urine screening was frequent, length of treatment was longer, higher methadone dosages were received, and incentives of higher value were attainable for patients. From this research, a number of core principles to maximise the effectiveness of incentives in the substance misuse field were developed by Kellogg *et al.* (2005). These were:

- reinforcements need to be given frequently
- at the beginning of treatment it should be easy to earn incentives
- reinforcements should comprise material goods and services of value to the client
- the effectiveness of reinforcements is contingent upon them being received directly following an exhibited goal behaviour as any delay in receiving reinforcement may weaken its effect
- staff are encouraged to focus on the positive things that clients do and not only negative behaviours

Kellogg *et al.* (2005) suggest that to ensure CM approaches remain effective as a psychosocial intervention, these core principles need to be followed and adhered to by all staff in the service.

This was further highlighted by Higgins *et al.* (2008), who stated that CM interventions that encourage high rates of positive reinforcement and minimal negative punishment, have been shown to be effective in retaining patients in treatments, reducing drug use and improving therapeutic outcomes. To be effective, contingencies need to involve some form of measurement to show that the therapeutic target has been achieved, a quick turnaround in delivering the incentive once the target response has been verified and an incentive that is powerful enough to act as a desirable reinforcer.

It was concluded, by Higgins *et al.* (2008) that CM is an “effective adjunct to pharmacological treatment...reducing ongoing opioid use,” (p.54) whilst increasing treatment retention and abstinence. They suggest that the task for researchers in the substance misuse field is to introduce to community treatment settings, a culture in which these findings can be used effectively to improve service provision, through the establishment of CM programmes as part of treatment guidelines.

1.6 National Guidelines and Policies Concerning CM Implementation

The National Institute for Health and Clinical Excellence (2007) offer best practice advice on the care of people who misuse drugs. The current clinical guideline 51 makes “recommendations for the use of psychosocial interventions in the treatment of people who misuse opioids, stimulants and cannabis in the healthcare and criminal justice systems” (p.4). It highlights that:

“pharmacological approaches are the primary treatment option for opioid misuse, with psychosocial interventions providing an important element of the overall treatment package.”

(National Institute of Clinical Excellence, 2007, p.4).

Of these psychosocial interventions, the strongest evidence-base highlights CM as being most effective (Department of Health, 2007).

The NICE (2007) guidelines state that CM programmes should offer patients incentives contingent on producing a clean urine sample and indicates that vouchers are the preferred incentive within the clinical setting, and should “have monetary values that start in the region of £2 and increase with each additional, continuous period of abstinence” (p.8). The guidelines also indicate that CM principles should be employed by community drug problem services to encourage harm reduction for those at risk of physical health problems as a direct result of their drug use, such as blood borne virus transmission. It states that tangible incentives, such as shopping vouchers “up to £10 in value” (p.8) should be offered to the patient over the duration of their treatment until they have completed their intervention.

This indicates that current guidance from the National Institute of Health and Clinical Excellence supports the implementation of CM programmes in community drug treatment settings. The rationale for the introduction of these incentive-based programmes is that they are used to reinforce positive behaviours, which is “consistent with current knowledge about the underlying neuropsychology of many people who misuse drugs” (NICE, p.14, 2007) rather than penalising patients who exhibit

negative behaviours. The guidelines further state that there is currently “good evidence” (p.14) to support the fact that CM programmes increase the chances of patients exhibiting these positive behaviours and that they are cost-effective as a treatment option (NICE, 2007).

In 2005 the National Treatment Agency for Substance Misuse (NTA) commissioned a report looking at CM principles and the extent of their implementation in NHS England (Weaver *et al.*, 2007). This study looked at a range of positive reinforcement methods; such as praise, take-home methadone and increase in methadone dosage and assessed how commonly these were encountered within drug treatment services in England. They highlighted that only two services were able to identify themselves as currently utilising CM principles. Positive reinforcement strategies used by these two services included, praise, token-based reinforcement in the form of travel and leisure passes, unsupervised methadone pick-ups and increased dosage of opiate substitute. However, they identified that these reinforcement strategies were not practised in relation to any formalised policies or procedures, but more on an ad hoc basis amongst key-work staff and service users. Therefore there were no set criteria for carrying out CM interventions within the treatment facilities that were being adhered to by all staff members.

Despite the growing body of research supporting the efficacy of CM procedures, they are not readily adopted into clinical practice (Kirby *et al.*, 2006). The reasons incentive programmes are not being implemented in community treatment settings may include: that they are too costly and require too much time to administer and that there is a poor fit with what clinicians are currently doing and what would be required of the incentive programme (Kirby *et al.*, 2006). This may be partly due to the fact that clinicians are not adequately trained to administer CM practices and that treatment providers may hold moral and/or ethical opinions about the principles of CM that create barriers to using incentive programmes, e.g. that incentives may be viewed by some as an attempt to bribe patients (Kirby *et al.*, 2006). To determine whether it is pragmatic to take CM programmes forward in a clinical setting, it is necessary to identify the underlying beliefs and attitudes of those providing services to substance users. With regards to CM practices, the NICE (2007) guidelines state that:

"drug services should introduce contingency management programmes...to reduce illicit drug use and/or promote engagement with services for people receiving methadone maintenance treatment" (p.7).

1.7 Barriers to Implementing CM in Current Substance Misuse Services

Recent research has highlighted that there is a divide between disseminating results of evidence-based therapies to practitioners and these therapies actually being implemented into current services (Fals-Stewart & Birchler (2001). In relation to CM practices, Andrzejewski *et al.* (2001) found that despite positive results being disseminated to staff, CM principles were only implemented in services following intensive didactic sessions, supervision and clinician rewards for adherence.

As described in the Mental Health and Substance Misuse - Draft Report (2007), to effectively tackle the problems facing those using substances, staff working in the field need to embark upon continual training in new interventions. Furthermore, staff also need to be supported to increase their knowledge and confidence in working with substance users to effectively tackle negative staff attitudes towards this client group and implement services that are effective in treating addictions long-term within a community setting. In particular, Allman *et al.* (2007) found that during their study, looking at characteristics of service providers which allowed for effective therapeutic relationships, that service users described the need for "respectful" (p.196) provision of services that would not be affected by the clinician's personal feelings regarding the users' circumstances, drug and/or lifestyle choices.

It is suggested that introducing CM programmes into the clinical setting "presents a significant challenge for current drug services" (NICE, 2007, p.16) as CM is currently not a widely-used intervention. Therefore there are a number of problems, particularly with regards to training staff on CM principles and delivering programmes within existing treatment settings. There is a need to address staff understanding and attitudes towards CM approaches and their knowledge on how these can be delivered within the community care setting.

Weaver *et al.* (2007) asked service providers to indicate what they perceived as barriers or challenges to implementing a more formalised CM protocol within their current service. It was found that staff responded with concerns over a number of issues, including; best practice, administering incentives, financing an incentive operation and the impact upon staff and patient rapport. Allman *et al.* (2007) found that when service providers were asked questions about ways to improve harm reduction services, responses included statements regarding the need for continuing training on new therapeutic approaches to ensure that service providers would “remain progressive in the field” (p.198). They also found that providers had difficulty in accessing relevant and up-to-date information on best practice which they felt made it more difficult for them to utilise these in their current services.

In relation to treatment providers’ understanding and beliefs about CM approaches, Kirby *et al.* (2006) state that differences in treatment providers’ perceptions of tangible and social incentives could provide clues to understanding whether objections to CM principles are specific to the use of tangible rewards or more generally to the use of consequences in treatment settings. As such it is necessary to understand the personal views of those providing services, to determine if beliefs around treatment models will influence the implementation of different psychosocial approaches in the treatment setting.

A further barrier to implementing CM programmes is the views and attitudes of service users and the wider public. In particular there may be concerns that CM “rewards illicit drug use;” “cannot be maintained in the long term;” is “open to abuse as people may cheat on drug tests” and that “incentive-based systems will not work outside the healthcare system” in which they were developed, in this instance the United States (NICE, 2007, p22). It is stated that there is currently a “lack of large-scale and well-conducted implementation studies” (NICE, 2007, p.22), and that this would be brought forward if current research aimed to address the specific components of programmes, such as staff understanding and attitudes towards CM principles and their implementation in the community treatment setting.

In looking at the implementation of different approaches, it is necessary to gauge the level of knowledge and understanding that service providers have of psychosocial interventions and their willingness to adopt these in their everyday practice (Addis *et al.*, 1999). Kirby *et al.* (1999) found that one of the most common concerns for staff regarding CM was that it was too costly to implement and that it was not a feasible treatment programme for their current service. NHS treatment expenses in the field of addictions is often a contentious issue, with the cost of treatment in Scotland currently standing at around 85 million per year, with 25 million of this being spent on MMT (Leask & Foster, 2009).

Willenbring *et al.* (2004) found that amongst staff the main concerns around the implementation of CM focussed around the philosophy of such an intervention. Further staff barriers to implementing CM highlighted that 57.5% stated that a lack of knowledge and skills necessary to carry out principles caused significant concern, whilst 54.8% felt that the lack of staff time appointed to individual clients was a factor and 50.9% stated that there was a low demand for CM practice within their current service (Willenbring *et al.*, 2004.) However there was no indication in the study as to whether or not the evidence-base for CM was widely disseminated.

McGovern *et al.* (2004) found that clinicians were favourable towards CM, but that they had the least knowledge about this as a potential treatment option for addictions. This may explain why studies, such as Willenbring *et al.* (2004) found that despite the high strength of evidence for CM, the current level of treatment implementation was relatively low throughout different addictions treatment settings.

1.7.1 Statutory versus Voluntary/Community Sector Staff Attitudes

The network of care involved in substance abuse treatment often means that there is a mix of professionally run health care services alongside organisations in the community and voluntary sector. Little is known about the diversity of beliefs surrounding the implementation of psychosocial interventions amongst those providing substance misuse treatment in both mainstream health and

community-based settings (Forman *et al.*, 2001). Much of the available research looking at staff opinions of treatment has sampled the views of those working as senior level clinicians and programme managers, who may have more decision making power in relation to their services treatment options (Morgenstern & McCrady, 1992; Swindle *et al.*, 1995) or has focussed solely on the views of one professional group, e.g. nursing staff (Allen, 1993).

Within substance abuse treatment facilities in the United States, it has been proposed that there should be a practice and research partnership aimed at increasing the knowledge base and development of staff in all treatment services about current pharmacological and psychosocial treatment options, in an attempt to enable the wider dissemination and application of empirically supported interventions, such as MI and CM within the psychosocial field (Lamb *et al.*, 1998). This proposal resulted in funding for clinical trials to carry out research into the testing of empirically- based psychosocial innovations in diverse community settings in an attempt to transfer this knowledge to the larger community of individuals involved in addiction treatments.

One such clinical trial was carried out by the Delaware Valley Clinical Trials Network (DV-CTN) who initially looked at the attitudes of different staff members, including statutory workers, such as doctors, nurses and social workers and also community workers such as counsellors, towards medication and psychosocial interventions in different treatment settings, including publicly funded and private hospitals, outpatient clinics, methadone maintenance clinics, residential community rehabilitation programmes and community recovery houses (Forman *et al.*, 2001). Specifically in relation to psychosocial innovations, such as MI and CM, it was found that staff from non-clinical backgrounds, with less formal qualifications in healthcare, were viewed as the main barrier to implementing these approaches. Meanwhile, staff with more formal qualifications, who occupied more senior clinical positions within services, were shown to be most likely to endorse the implementation of these approaches in their treatment settings. They concluded that those in treatment settings that required less formal education and qualifications were more likely to be less informed about current empirical research in the field and as such would be less likely to feel comfortable in implementing it as part of their treatment package (Forman *et al.*, 2001).

Despite there being little available literature in Scotland which has focussed on looking at bridging this gap between statutory healthcare provider views on treatment approaches and the views of those working in the voluntary/community sector, it is clear from the evidence in the United States study, that to apply evidence-based treatments across as wide a treatment setting as possible, both in Scottish statutory and voluntary/community sectors, it is necessary to gain an understanding of how familiar staff members are with current research into psychosocial interventions, such as CM, and what their beliefs are about these treatment processes, as this may pose potential barriers to widespread dissemination and application of innovative treatments. With changes in healthcare policy placing increasing emphasis on standardised treatments across the substance misuse field, and with financial burdens on the NHS, it may be that patients may be more likely to quickly access these treatments from community-based services (Morgenstern *et al.*, 2001).

1.7.2 Staff Attitudes towards Service Users

In relation to staff opinions, one area that has been identified as a current problem that needs to be prioritised is the stigma of substance misuse and the negative attitudes of staff towards users (Mental Health & Substance Misuse Draft Report, 2007). This has important implications in delivering psychosocial interventions, as it has been highlighted that therapist's attitudes and willingness to work productively with substance users can predict efficacy of engagement in services and treatment retention (Albery *et al.*, 2003). The role of therapist attitude in the effectiveness of psychosocial treatment was originally studied by Shaw *et al.* (1978) looking at problem drinkers. It was identified that the therapist's attitudes were influenced by their own views regarding "role adequacy," "role legitimacy," and "role support." This indicated that positive views and attitudes were expressed by therapists working with problem drinkers when: they felt that they had appropriate knowledge and skills to carry out the work; they felt that the work they were involved in was part of their role responsibility and that they felt supported by their colleagues to carry out their work. This highlights that the views and attitudes of individual staff plays an important part in the implementation of services within the organisation. As described by Allman *et al.* (2007), changing services to deal with the problems faced by drug users:

"may necessitate some shift in the ways that providers and others envision and understand the use and needs of people and subcultures who either exist below society's radar or function at its edges" (p.195).

The NICE (2007) guidelines highlight that studies, such as McGovern *et al.* (2004), Kirby *et al.* (2005) and Ritter and Cameron (2007), involving organisational factors, have indicated considerable resistance by both staff and service users to implementing CM practices. However, they reported a positive shift in attitudes and understanding of the programmes once it was seen to have a beneficial impact on the lives of those misusing drugs. Ritter and Cameron (2007) carried out a survey of service provider attitudes towards the principles of CM to identify current limitations to implementation. They concluded that "systematic surveying of clinician's attitudes towards CM is likely to shed light on important obstacles in implementation" (p.312) and that clinicians' understanding of CM is likely to be fundamental in implementing new services. They also found "broad support and positive clinician attitudes towards CM" (p.314) with more than 50% of respondents stating that they were in favour of adding a social incentives programme to their current service, whilst 42% were in favour of adding a tangible programme.

Kellogg *et al.* (2005) found that when attempting to implement either social or tangible incentives successfully, there were four aspects that need to be considered:

- (i) that CM programmes are endorsed by decision and policy makers
- (ii) staff need to be educated and trained on the basic principles and delivery of CM
- (iii) staff need to be able to recognise that CM is an intervention that is aimed at changing specifically identified goals and is not simply rewarding people for good behaviour
- (iv) the service in which CM is implemented needs to shift its focus to a more incentive-orientated one.

They found that in services where these basic principles were upheld, service users were more motivated to comply with treatment and that there were more positive relationships built up between

service users and staff and between staff members in the service. They concluded that the introduction of CM in the service had changed staff attitudes towards incentive programmes and that they no longer viewed CM as difficult to implement and deliver, instead viewing it as the main focus of psychosocial interventions with service users.

In comparing the views of their Australian sample with the American sample from Kirby *et al.* (2005), Ritter and Cameron (2007) found that their sample demonstrated less support and a greater concern about CM, with a high level of neutral responses to questions on the principles and practices of CM. This could be interpreted as indicating a lack of knowledge about the principles of CM or a lack of experience with such incentive programmes. However, one area of strong similarity between the United States' and Australian samples was the greater support for social incentives over tangible ones.

1.8 Service Provider Views on CM

In gaining some insight into the beliefs and attitudes of those delivering services to substance users, demographic information on participants such as status within the organisation, professional credentials, length of time working in the substance misuse field, recovery status and previous participation in incentive programmes may help to explain these barriers to implementation (Kirby *et al.*, 2006). There is currently a wealth of research in the CM field that indicates a correlation between these demographic factors and strength of support for CM interventions.

For example, Kolpack (1992) discovered that the vast skill mix of individuals working in this field means that there is often the presence of recovering users amongst the staff group, particularly in the voluntary sector. It is evident that staff member's own beliefs and values around recovery from substance misuse can influence the course of the therapeutic process, for example, staff who are in recovery from alcoholism may lean more towards a 12-Step approach if they themselves have found this to work in motivating them towards abstinence (Noordsy *et al.*, 1994).

This was studied by Shipko and Stout (1992) who assessed the beliefs and educational backgrounds of 45 alcohol counsellors, 15 of whom viewed themselves as in recovery. They found that 93% of those who were themselves in recovery viewed alcoholism as a “disease” as opposed to 67% of those counsellors who were not in recovery. They further found that substance misuse workers with graduate level qualifications were found to be more abstract and creative in their thinking with regards to treatment approaches, whereas those with less educational attainment tended to focus on more concrete and manualised treatment approaches.

This work was furthered by Humphreys *et al.* (1996) who looked at recovering substance abuse staff member’s beliefs about addiction, with regards to: own recovery status, educational attainment and age and years of practice in the field. They tested 329 staff; 47 of whom described themselves as in recovery. From the information obtained, they concluded that being in recovery did not imply a particular perspective on treatment approaches and that regardless of recovery status, it was the values and culture of the treatment approach that staff currently worked with that influenced their beliefs. They found that educational level of staff had a significant impact on beliefs; particularly that the higher the level of educational attainment, the less likely the individual believed that substance misuse could be classified as a disease. They found that those with a higher level of education were more likely to endorse psychosocial interventions and approaches. They further found that age of staff could predict belief in treatment approach. In particular, older staff members were more likely to view substance misuse via the disease model than younger staff; they posited that this may be because younger staff have been trained in an era which promotes research and understanding of different viewpoints. They concluded that recovery, age and educational attainment were only limited factors that could have an impact upon the process of treatment for substance users and that a further investigation into the knowledge and beliefs about different interventions was necessary.

A further study by Stoffelmayr *et al.* (1999) found that therapists with lower levels of education were more likely to endorse a larger number of counselling techniques than those with higher educational attainment, meaning that those in managerial positions with the influence over service provision at an organisational level may be less likely to welcome controversial approaches such as CM.

In relation to service provider characteristics, Ball *et al.* (2002) found that men are more likely to view therapeutic approaches such as relapse prevention: a programme of self-management that teaches people to anticipate the warning signs that indicate they are likely to relapse (Marlatt & Gordon, 1985), more passively than their female counterparts, being less likely to encourage patients to participate collaboratively and less inclined to actively carry out relapse prevention approaches during sessions. Furthermore, therapists with masters level qualifications were less supportive than those without an advanced degree of the 12-step approach and therapists who identify themselves as being in recovery from substance misuse, hold more positive and optimistic attitudes towards the 12-step approach and more eclectic interventions than those who do not identify themselves as being in recovery.

The skills, abilities and confidence of service providers are paramount in introducing new and/or controversial treatment approaches in substance misuse treatment settings. As suggested by Grosenick and Hatmaker (2000); to improve service delivery, provider characteristics are of the greatest importance, as they are the main component controlling the services that clients encounter and are the focus of how users perceive the effectiveness of that treatment facility.

1.9 Service User Views on CM

It has been found that collaboration with service users attending self-help groups is an effective way to access the views of a typically hard to engage client group (Toumourou *et al.*, 1994) and can increase the number of individuals accessing different services if they have been involved in the consultation of planning and evaluating new drug services (Jordan *et al.*, 1985). As found by Toumourou *et al.* (1994) there is little evidence of the views of service user groups in the planning of drug services, despite the fact that they are an effective means of linking current service users, previous service users and staff groups in strategic planning. Furthermore through early collaboration in the planning of potential treatments, services can avoid a number of pitfalls by gaining an insight into how service users view new treatment approaches and how likely they are to access these in their own treatment setting.

However, information provided by service users accessing self-help groups or service user involvement groups are a limited sample of those actually using services. As such the views gathered from this sample may only represent those of the most motivated individuals who are accessing treatments.

1.10 Rationale for Current Study

As described by Weaver *et al.* (2007) the implementation of CM in UK drug treatment services has been "delayed by uncertainty over a number of operational issues and a lack of evidence about best practice" (p.5). For staff, issues included an understanding and knowledge of CM principles; such as definitions of incentives and target behaviours, an understanding of eligibility for participation in approaches, timing of interventions and type of incentive. Furthermore, staff indicated that they had concerns over how CM principles would be viewed by patients on their current MMT programmes; that they may feel demoralised, patronised or manipulated or that they may feel that incentives undermine their relationships with key-workers. Further operational issues that staff highlighted as potential barriers to CM implementation included means to finance an incentive programme within current service budgets and time constraints in relation to administering analysis treatments, such as thrice weekly urine testing to identify if patients are meeting drug free targets. The paper concludes that CM practices are unlikely to become a routine focus of service provision, due to what staff perceive as too many barriers and without an ethical debate on its principles. It is clear that to understand why these barriers exist, it is necessary to assess the knowledge and attitudes of staff currently working in the drug misuse field, to shed light on their ethical concerns over CM interventions and also to identify whether the negative concerns voiced by staff regarding service user views and experiences of CM are justified.

1.10.1 Comparison of Scottish, American and Australian Samples

The understanding of CM principles and ethical debates surrounding such interventions was studied by Kirby *et al.* (2006) who used the Provider Survey of Incentives (PSI) questionnaire (see Appendix

1) to look at, (i) what are the specific beliefs held by service providers regarding CM and how prevalent are these beliefs; (ii) in relation to tangible and social incentive programmes, do service provider beliefs differ; and, (iii) do service provider characteristics have an impact upon beliefs and objections to CM approaches. They state that if:

"researchers are to facilitate the adoption of efficacious interventions into community-based treatment programmes, it would be helpful to better understand the specific beliefs and objections that community treatment provider's hold regarding those interventions." (p.20)

This would help gain an understanding of objections that may be particularly important in guiding researchers to develop new CM interventions that are more community friendly and easily disseminated. It is also helpful to know the prevalence of specific beliefs and objections so that those disseminating CM are better prepared to address these beliefs and to be able to recognize objections that are less likely to be held by the majority of treatment providers.

As has already been noted, Kirby *et al.* (2006) found that significantly more positive beliefs were observed for social than tangible incentives. With regards to objections and limitations, the top objections, highlighted by 30% of participants, covered three concerns (i) incentives do not address the underlying issues of addiction (ii) it is not right to give an incentive for one behaviour when clients are not fulfilling other treatment expectations and (iii) incentives will cause jealousy amongst clients. For tangible rewards it was also highlighted that service providers felt that their current service would not be able to afford the costs involved in implementing an incentive programme, whilst 35.5% felt that "giving tangible rewards to clients who had earned it, but not to others, would result in clients arguing." More positively, only 30% believed that clients who sold their tangible rewards would use the money to continue their substance misuse. In general, they found that of those responding to the survey, 77% were in favour of adding a social incentive programme to their current treatment setting, whilst only 54% were in favour of adding a tangible programme.

In replicating the Kirby *et al.* (2006) study with an Australian sample, Ritter and Cameron (2007) found that over 68% of those responding to their survey were in favour of adding a social incentives programme to their current treatment setting, whilst only 42% were in favour of adding a tangible incentives programme, compared to 77% and 54% of the American sample, respectively. As with the American sample, they found a number of objections and limitations that appeared to be most strongly sanctioned by respondents. The most common objection to CM practices was that they do not address the underlying issues of addiction; with 64% of respondents stating this about tangible incentives and 59% of respondents feeling the same about social incentives. Furthermore, those replying to the Australian survey indicated that they felt implementing CM practices would be impractical due to the need for frequent urinalysis, with 52% finding this too time-consuming to be carried out for tangible programmes and 49% finding this too time-consuming to be carried out for social programmes, and therefore carrying out this practice would be too labour intensive for staff.

Although there were many similarities between the views of the American and Australian samples, there were some noticeable differences in beliefs about CM practices and principles. In particular it was noted that the American sample more strongly objected to patients being given incentives in the absence of abstinence; with approximately 50% of respondents feeling that this was inappropriate, whilst the Australian sample did not object as strongly to this (Ritter & Cameron, 2007). It was concluded that Australian clinicians may have had less problems with this idea as their healthcare principles and strategies aimed at minimising the harmful consequences of drug use and associated risky behaviours (Marlatt, 2002), than the United States (Ritter & Cameron, 2007).

1.10.2 Aims of Study

The present study aims to investigate the views of a Scottish sample of service providers within the substance misuse field on the principles and practices of CM. It also aims to compare the views of the Scottish sample with those published in studies carried out in both the United States (Kirby *et al.*, 2006) and Australia (Ritter & Cameron, 2007). It was necessary to gauge if there were any identified cultural differences between these three healthcare providers. A thorough search of recently

published research indicated that no such study of cross cultural comparisons of these three healthcare providers had been carried out. Furthermore, there were no studies specifically looking at the comparison of views within substance misuse services, other than the current paper by Ritter and Cameron (2007).

The views of treatment providers in implementing CM programmes within services have been studied in the United States (Kirby *et al.*, 2006), Australia (Ritter & Cameron, 2007) and are being addressed in studies carried out in English services (Weaver *et al.*, 2007). However, at present, there are no studies focussing on the views of service providers on implementing CM programmes in Scotland. Furthermore, as concluded by Weaver *et al.* (2007) one of the major limitations to current studies on CM approaches is the lack of research looking at the views of service users within these study settings.

As such, the following study aims to identify if the specific beliefs and objections to CM which were identified by Kirby *et al.* (2006) and Ritter and Cameron (2007) are held by treatment providers within the Scottish sample providing services to those misusing substances.

Furthermore, in line with the NICE (2007) concerns that the challenges facing implementation of CM in current healthcare settings is also affected by the attitudes of service users and the wider public, the current study also undertook to provide an insight into understanding the views of service users.

Given the previous research findings, three specific questions have been generated:

- (i) is there a difference in the views of voluntary services and statutory services regarding contingency management principles, including differences between tangible and social incentives?
- (ii) how do the overall views of service providers in Scotland compare with those of service providers in the USA and Australia?

- (iii) what are the views of service users regarding contingency management principles and procedures?

2. METHOD

2.1 Introduction to Methodology

The present study aimed to look at the views of service providers in both the statutory and voluntary/community sectors on the principles and practices of Contingency Management (CM) in substance misuse treatment settings. Furthermore, the study aimed to access the views of service users on the same principles and practices to examine any differences on opinions or objections.

The present investigation replicated similar studies carried out in both the United States (Kirby *et al.*, 2006) and Australia (Ritter & Cameron, 2007), which looked at the views of service providers on implementing CM programmes, so that a cross-cultural comparison could be made of providers' views in Scotland, United States and Australia.

Within the study the main aims being looked at were:

- Differences between views on social and tangible incentives of the overall sample
- Differences in the views on social and tangible incentives between statutory and voluntary/community sectors
- Differences in views between Scottish, United States and Australian samples on CM
- Views of service users on the practices and principles of CM

2.2 Ethical Issues

Ethical approval for this study was sought and obtained from the Lothian NHS research ethics panel, who considered this to be an appropriate research study under the terms of service audit and evaluation (see Appendix 2). The panel advice confirmed the current study was an “opinion survey” seeking views on “service delivery...and service development.” The guidance provided by the ethics panel indicated that the current study is viewed as a service evaluation as it (i) was designed to define

current standards, (ii) to measure opinions without reference to a pre-determined standard, (iii) included the administration of simple interview and questionnaire, and (iv) involved no allocation of participants to intervention groups (see Appendix 2). This use of the service user focus group was viewed under the terms of administration of simple interview to seek views on service development.

2.3 Design

This study adopted both a quantitative and qualitative approach to inform analysis of both service providers and service users' views. The rationale for using a mixed methods design was to maximise answers to the research questions by providing a more complete picture of different individuals' views. By gathering parallel views from different stakeholders; service providers using the quantitative PSI and service users through a qualitative focus group, it provided a broader range of views regarding CM policies and practices. It was felt that neither method would provide sufficient information on its own to allow for adequate analysis. Furthermore, previous research by Weaver *et al.* (2007) highlighted a lack of findings regarding service user views on CM. It was felt that it would be beneficial for service users to express their feelings towards something that could potentially alter current service provision.

2.3.1 Quantitative Information - Provider Survey of Incentives (PSI)

Information from statutory, voluntary/community sectors working within substance misuse settings, was collected through the Provider Survey of Incentives (PSI) questionnaire (Kirby *et al.*, 2006). Throughout the paper, the terms "voluntary" and "community" are used interchangeably to describe those services which exist in the community who are not funded through a statutory organisation such as the National Health Service, local Government or local Council.

The PSI used in the study is a 47 item survey that was developed to assess substance abuse treatment providers' attitudes towards CM programmes. Items were developed by Kirby *et al.* (2006) from responses given by 10 service providers during an in-depth interview, from which questions relating

to beliefs, objections and barriers to implementation were developed. The items on the PSI were categorised into five main themes:

- (i) limitations of CM programmes, e.g. do not address underlying issues
- (ii) moral or ethical objections, e.g. incentives are a bribe
- (iii) negative side effects, e.g. jealousy or arguments amongst clients
- (iv) impracticality, e.g. too expensive
- (v) positive opinions regarding incentives, e.g. help the client become abstinent

Participants indicated degree of agreement with each question using a 5 point Likert scale; ranging from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), to 5 'strongly agree'.

Within the PSI, anonymous demographic information was collected from participants, indicating position within the organisation, academic credentials, number of years worked in the field, own recovery status and previous participation in incentive programmes. Although the questions in the Scottish sample remained the same as the original questions posed by the United States group, certain aspects were altered to make it more culturally applicable. For example, the job positions and academic credentials were changed to be more representative of those achievable in Scotland. Also, the currencies of incentives used in the tangible questions were changed from United States dollars to pounds, through the use of a currency converter, to the nearest whole British pound, from \$1, \$10, \$50 and \$150 to £1, £5, £35 and £100, respectively.

Within the PSI questionnaire, 31 questions assessed beliefs about both tangible and social incentives, for which definitions of tangible and social incentive programmes were provided. Participants were asked to indicate how much they agreed with each of these items twice, once for tangible incentives

and once for social incentives. Within these 31 questions, three looked at when incentives should be introduced into treatment (39, 40, 41), nine focussed on positive opinions of incentive programmes (17, 21, 23, 28, 30, 35, 37, 42, 47) and nineteen looked at the negative opinions of incentive programmes (18, 19, 20, 22, 24, 25, 26, 27, 29, 31, 32, 33, 34, 36, 38, 43, 44, 45, 46). In addition to these 31 questions, there were 10 items that focused only on tangible incentive programmes, 6 of which looked at affordability of CM programmes in current services i.e. £5, £35 or £100 per client per month. The other 4 items looking specifically at tangible incentives related to positive or negative effects of providing individuals with rewards that have a monetary value e.g. "clients who sell tangible incentives will use the money to continue their drug use."

Over and above the 31 parallel tangible and social questions and the 10 specific tangible items, there were 4 questions specific to views on social incentives, e.g. "structured praise is not necessary because counsellors already praise accomplishments" and a further 2 questions that looked at provider beliefs in the 12-step approach to substance misuse.

2.3.2 Qualitative Information – CM Focus Group

Information from service users on how they felt about the principles and practice of CM was obtained by using a qualitative focus group. This is a group discussion whereby instead of asking a number of questions in turn, the researcher facilitates discussions between the focus group participants, encouraging them to ask questions of each other and describe their own views, attitudes and experiences regarding a specific topic that the researcher introduces (Barbour & Kitzinger, 2001).

As Barbour (2007) explained, focus groups are often used in situations where in-depth one-to-one interviewing is not possible, as a method of obtaining rich data from a number of individuals on the specific topic. The main benefit of using the focus group is that it encourages debate around topics that the individuals may have had little opportunity to discuss before, without making participants feel pressurised into responding, as in one-to-one interviews (Barbour, 2007).

The main benefit of using focus groups in the substance misuse field is that, as described by Barbour and Kitzinger (2001), they are an effective method in accessing groups which are typically deemed hard to engage (Toumouroou *et al.*, 2004) as they are viewed as less intimidating to potential participants than in-depth interviewing.

2.3.3 Focus Group Topic Guide

The focus group discussion was moderated by the use of a topic guide (see Appendix 3) which provided the researcher with prompts to direct the discussions if information was not spontaneously generated by the group. These topic guides also help to encourage discussions and debate amongst the group members of commonalities or differences and help them to put forward their views, without engaging participants in extensive dialogue and describing individual accounts, which can then be used to help focus discussions surrounding the main topic (Barbour, 2008).

2.3.4 Focus Group Stimulus Material

To encourage further discussion and focus group participation, individuals were presented with a newspaper article that acted as stimulus material (see Appendix 4). Using appropriate ready-made stimulus materials can allow participants to bring up topics which may be difficult to raise (Barbour, 2008). The stimulus article for the focus group was a front page story published in the “Metro” newspaper in March 2009 and represented a similar CM practice being carried out in a neighbouring health board in the area of smoking cessation. It was aimed at encouraging participants to open up the field of discussion by debating the use of CM in a different setting, other than the drugs field, but one that would enable them to make common links to substance misuse. This transferability is evident in the focus group transcripts, as the stimulus material raised questions amongst the group about whether different addictions could be treated the same (see Appendix 5).

2.4 Participants

2.4.1 Statutory Sector Participants

2.4.1.1 Participant Information

The Scottish statutory services in the study were represented by a sample from Lothian Substance Misuse Directorate: including the Harm Reduction Team (HRT), Community Drug Problems Service (CDPS), Primary Care Facilitation Team (PCFT), Pharmacy and medical and nursing staff from locality based clinics in Lothian. Those asked to participate included medical doctors, psychiatrists, clinical psychologists, trainee clinical psychologists, nursing staff, student nurses, dentistry, administration staff, addictions key-workers and pharmacists.

The number of PSI questionnaires sent out to statutory staff was 103.

2.4.1.2 PSI Inclusion Criteria

Inclusion criteria for completion of the PSI involved currently working in a statutory service that provides substance misuse services within the Scottish NHS, to clients who are at present or have previously been using illicit drugs. Provision of substance misuse services from statutory sectors included needle exchange, methadone maintenance programme, dentistry, talking therapies, practical, social or emotional support to clients.

2.4.1.3 Recruitment of Participants

Initially participants were recruited through the researcher attending the weekly meetings of different target services in the statutory sector to introduce the topic of CM and the PSI questionnaire. This ensured that potential participants were able to ask any questions regarding either CM principles or questionnaire completion. As it was assumed that there would be a varying degree of knowledge with

regards to the principles and practices amongst members of different teams, the researcher introduced the topic using the “What is Contingency Management (CM)?” information sheet (see Appendix 6), of which a paper copy was then given to each potential participant. This explained the concept of CM programmes and described both tangible and social incentives and ensured that all participants had been given the same information prior to the completion of the PSI. This was done to ensure that the researcher did not communicate any bias or personal opinions to potential participants. Each participant was also given an information sheet on the purpose of the investigation (see Appendix 7) which also contained the researcher's contact details should they have wished to ask further questions about any aspect of the study.

Following an initially low return rate of questionnaires, a further attempt at recruitment was carried out sending a copy of the information sheet, information on CM approaches and a paper copy of the PSI questionnaire to each member of the statutory services asked to participate. This was followed up with an email asking for participants to complete the PSI questionnaire that was placed in their mail slots and giving an identified cut-off date for completion. A final email was sent to all staff members prior to this closing date as a reminder to complete the survey.

2.4.1.4 Participant Anonymity and Consent

Throughout the recruitment phases, anonymity was ensured as initially the researcher attempted to contact all members of staff attending the team meetings and during the second recruitment phase, contacted all members of staff via email on both occasions. As there was no means of tracking who had completed and returned the paper copies of the PSI and participants were asked not to place any identifiable information on the questionnaire, anonymity was retained throughout the study.

Individuals were assumed to have consented to participating in the study through completion and return of the PSI questionnaire, as they were informed throughout the recruitment phase that participation was voluntary.

2.4.2 Voluntary and Community Sector Participants

2.4.2.1 Participant Information

The Scottish voluntary and community services were represented by a sample from the Lothian area. Those asked to participate included a number of outreach projects who received referrals through various agencies, health and social care and self-referral. Individuals asked to complete the PSI questionnaire included: addictions support workers, addictions key-workers, project managers, administrative staff and volunteers.

The number of PSI questionnaires sent out to voluntary and community agencies was 100.

2.4.2.2 PSI Inclusion Criteria

Inclusion criteria for completion of the PSI involved currently working in a voluntary agency within Scotland, providing substance misuse services to clients who are at present or who have previously been using illicit drugs. Voluntary and community agencies were sourced from the SDF website and from a database of local services produced with the Lothian HRT. Provision of substance misuse services from voluntary and community sectors included needle exchange, talking therapies, practical, social or emotional support to clients.

2.4.2.3 Recruitment of Participants

Initially participants were recruited through the researcher attending the agency's weekly meetings to introduce the topic of CM and the PSI questionnaire. This ensured that potential participants were able to ask any questions regarding either CM principles or questionnaire completion. As it was assumed that there would be a varying degree of knowledge with regards to the principles and practices amongst members of different teams, the researcher introduced the topic using the "What is Contingency Management (CM)?" information sheet, of which a paper copy was then given to each

potential participant. Again, this explained the concept of CM programmes and described both tangible and social incentives and ensured that all participants had been given the same information prior to the completion of the PSI. This was done to ensure that the researcher did not communicate any bias or personal opinions to potential participants. Each participant was also given the information sheet on the purpose of the investigation, which contained the researcher's contact details should they have wished to ask further questions about any aspect of the study.

As with the statutory sector, there was an initially low return rate of questionnaires. A further attempt at recruitment was carried out by phoning the agencies service co-ordinator to ask if they could email all staff members and volunteers with the information on the study and providing their staff with paper copies of the PSI questionnaire, which the researcher forwarded to the agency. The researcher asked that this be followed up with a final email to all staff members prior to the closing date as a reminder to complete the survey.

2.4.2.4 Participant Anonymity and Consent

Throughout the recruitment phases, anonymity was ensured as initially the researcher attempted to contact all members of staff attending the team meetings. During the second recruitment phase, contact was initially made with the service co-ordinator of each agency. This ensured that no personal information on staff and volunteers was passed to the researcher. As there was no means of tracking who had completed and returned the paper copies of the PSI and participants were asked not to place any identifiable information on the questionnaire, anonymity was retained throughout the study.

Individuals were assumed to have consented to participating in the study through completion and return of the PSI questionnaire, as they were informed throughout the recruitment phase that participation was voluntary.

2.4.3 Focus Group Participants

2.4.3.1 Participant Information

Participants for the focus group were sourced through the Scottish Drugs Forum (SDF), a voluntary agency that provides Scotland-wide support for those affected by addiction and also provides information and services to the statutory sector. The SDF have weekly meetings involving a service-user involvement group, which includes a number of individuals across Scotland who have used substance misuse services. Initial contact was made through the agency co-ordinator. In total there were 9 service users present for the focus group, of which there were 7 males and 2 females. All participants were at varying stages of abstinence; some were still maintained on methadone prescriptions whilst others had been drug free for a number of years.

2.4.3.2 Focus Group Inclusion Criteria

The inclusion criteria for the focus group involved being an existing member of the SDF service-user involvement group and being able to attend the meeting for which the focus group was planned.

All participants were previously or were currently users of substance misuse services.

2.4.3.3 Recruitment of Participants

The researcher contacted the service user involvement co-ordinator to take the idea of carrying out the focus group, to the user involvement meeting in order that potential participants could decide whether or not they wished the group to be involved in the study. This was then taken to a vote and was passed by the members present. The members of the SDF service-user involvement group were told when the focus group would take place and those wishing to attend were encouraged to do so.

2.4.3.4 Participant Anonymity and Consent

Throughout the focus group, participants were told that they could use pseudonyms should they wish to retain anonymity. Furthermore, they were informed that no identifiable information would be written down and that any direct quotes used in the results of the study would be attributed to a participant number (ranging from 1 to 9) instead of individual names. This ensured that both the name and gender of the participants remained anonymous.

Although participants were assumed to have consented to taking part in the focus group through their attendance, they were each provided with an information sheet on what the study was about (see Appendix 8) and information the information sheet “What is Contingency Management (CM)?” They were then given a consent form (see Appendix 9) to complete following their decision to take part. This ensured that participants had: read the information sheet, felt they had the opportunity to ask questions about the study, were happy with the information they had been given about the study, consented to participating, were aware that they could withdraw at any time, agreed to being recorded and agreed to anonymous data being included in the results of the study.

2.5 Management of Participant Data

All PSI questionnaires remained anonymous and participants were asked not to place any identifiable information on the completed questionnaire. All questionnaires were stored in a locked filing cabinet throughout the study.

The focus group interaction was recorded with a digital recorder. The recordings were stored on a computer which was password secured and erased from the digital recorder. The dialogue was transcribed verbatim by the researcher and any identifiable information was changed to ensure anonymity of the service users participating in the group. All paper copies of focus group transcriptions were stored in a locked filing cabinet throughout the study.

2.6 Procedure

2.6.1 PSI Job Agreement Match

Prior to the main data collection, to ensure that there was an internal consistency in the responses to the demographic information on the PSI, a job match sample was carried out with 12 members of a team within the Substance Misuse Directorate. Organisational position and academic credentials have different names in the UK, US and Australia, therefore to ensure that when completing the international comparison aspect of the study the views from the same designated members of staff would be as consistent as possible throughout the study, participants were asked to complete a matching test. Participants were asked to match job titles from Scotland with counterpart titles from the United States (see Appendix 10). Participants were asked to match the titles assuming that they would perform the same roles in both Scotland and the United States. Information on job titles from the Australian sample were not available and as such were not used in this matching procedure. Once this was completed, position within organisation titles were amended on the Scottish version of the PSI to reflect the majority result from the matching test. These majorities indicated that participants matched United States job titles with the following Scottish job titles, as seen in the table below. It should be noted that this task relied on participants matching the duties that they performed in their own jobs with the perceived duties of the American counterpart job titles.

Figure 2.1. Matched Job Titles for United States and Scotland

United States Job Title	Scottish Job Title
Assistant Counselor	Addictions Nursing Staff
Medical Staff	Doctor/Psychiatrist
Therapist	Psychologist/Trainee Psychologist
Intake Worker	Addictions Key-worker
Program Director	Project Manager
Administrative Support	Administrative Support
Project Administrator	Project Support Worker

2.6.2 PSI Data Collection

Once the information on the PSI reflected Scottish information, questionnaire packs for statutory, voluntary/community sectors were put together. These packs contained the information sheet on the study, the “What is Contingency Management (CM)?” information sheet and a copy of the PSI questionnaire. In the initial recruitment phase these packs were taken to meetings to inform participants of the study and in the second recruitment phase these packs were placed in the mail slots of participants, by the researcher in the statutory sector and by the service co-ordinators in the voluntary/community sectors. This was followed up by an email with a completion date, giving participants approximately 3 weeks to complete the questionnaires. A week before the completion date the researcher/co-coordinator sent a further reminder email to all individuals within the service.

Completed statutory surveys were returned to the researcher through either being placed in a mail slot, marked “PSI Questionnaires” or by post directly to the researcher’s office. Completed voluntary/community surveys were returned to the researcher either by post, directly to the office or through the researcher visiting the service co-ordinators at a designated collection time.

Information from the PSI questionnaires was stored on an electronic database as they were returned.

2.6.3 Focus Group Data Collection

The researcher attended a meeting of the weekly SDF service-user involvement group to carry out the focus group. This lasted approximately an hour, during which time the responses of the focus group were both recorded electronically and in notes made by the researcher.

The focus group began by looking at the stimulus material and discussing their views on CM in the field of smoking cessation. This was followed by the researcher asking the first prompt question to generate information from the participants. Further prompts were asked when participants had generated as much information as they could or when participants strayed off topic.

The electronic information was then transcribed verbatim to produce transcriptions for coding, alongside further notes made by the researcher during the focus group. Transcriptions were then given to a Trainee Clinical Psychologist, who was a member of a peer qualitative supervision group, for inter-rater reliability coding before the final themes emerging from the data analysis were reported.

2.7 Data Analysis

2.7.1 Analysis of Quantitative Data

Advice on the analysis of the quantitative information gathered through the PSI questionnaire was sought and discussed with two statisticians within the Department of Clinical Psychology at the University of Edinburgh. This included ensuring that the correct statistical analyses were carried out in relation to answering the aims of the present study. Following these meetings, the researcher decided to proceed with analysing the data as discussed in the quantitative analytic plan.

2.7.2 Quantitative Analytic Plan

In analysing the differences between statutory and voluntary/community sector participants towards unique tangible and social items, a mixed model Analysis of Variance (ANOVA) was carried out. This analysis was used as respondents are measured in more than one condition, i.e. in this instance they are measured on tangible and social incentives. This measure also allows for the analysis of both related and unrelated variables, in this instance the related variable is the within groups measure, the unrelated is the matched between groups measure of statutory or voluntary staff, and participant responses are measured on both tangible and social variables. It is a related measure since the same people are giving their response to two different variables, whilst it is unrelated since the group measure consists of two different sets of people, statutory and voluntary staff.

To look at the overall positive attitudes of participants towards tangible and social incentives, a new variable was created by selecting relevant questions on the PSI that tapped attitudes towards the

philosophy of CM, namely unique tangible items 1, 2, 3, and 10, unique social items 11, 12, 13 and 14 and parallel items 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 42, 44, 45, 46 and 47. Scores on parallel questions 18, 19, 20, 22, 24, 25, 26, 27, 31, 32, 33, 34, 36, 38, 43, 44, 45 and 46 were reverse prior to analysis. In this instance, items relating to the practicalities of implementing an incentive programme were removed to create an overall attitude variable for tangible incentives and an overall variable for social incentives. Initially it was aimed to create one overall variable which looked at positive attitudes to incentives by combining tangible and social incentives scores, however, as many participants had opposing views, i.e. were positive about social incentives but negative about tangible incentives, this created a variable which was unrepresentative of their attitudes as a whole towards incentive programmes, as they are tapping into participant attitudes to two different types of incentive programme. As such, the analysis was carried out twice, once for overall tangible attitude and again for overall social attitude.

An internal reliability analysis was carried out on participant's overall attitudes towards tangible and social incentives using Cronbach's Alpha, which measures consistency among individual items on a scale (Streiner & Norman, 2003). Internal reliability for tangible incentives measuring overall attitudes was 0.93 and internal reliability for social incentives measuring overall attitude was 0.92. A result of 0.7 or higher on Cronbach's Alpha indicates good internal reliability (Streiner & Norman, 2003). As such, a number of mixed model ANOVA's were carried out on the demographic information looking at comparing the overall variables of tangible and social attitudinal views against participant information such as statutory or voluntary sector, position within the organisation, academic credentials, years working in the addictions field, recovery from substances and previous experience of working with incentive programmes.

In looking at the comparison of service provider attitudes in the Scottish, American and Australian samples, results were analysed in keeping with those reported in both Kirby *et al.* (2006) and Ritter and Cameron (2007). The percentages of participants agreeing or strongly agreeing (indicating a response of 4 or 5, taking into account questions which were reverse scored) were calculated for each of the unique tangible and social items and also for the parallel items. These were then compared

against the same percentage results for the American and Australian samples to allow the researcher to highlight which of the groups had the highest agreement ratings for each question.

The views of service users on CM principles was analysed using a qualitative General Inductive Approach (Thomas, 2006), as described in sections 2.7.3 and 2.7.4.

2.7.3 Analysis of Qualitative Data

Information on methods in which to analyse the qualitative information from the focus group was sought through discussions with a qualitative peer supervision group, consisting of fellow Trainee Clinical Psychologists who were also carrying out qualitative analysis, and also with a lecturer specialising in qualitative analysis within the Department of Clinical Psychology at the University of Edinburgh. The researcher decided that although the focus group produced qualitative information, as the PSI responses from service providers were the main focus of present study, it was not within the scope of carrying out full qualitative analysis; such as required when using a Grounded Theory Approach (Strauss & Corbin, 1990). Following these discussions, the researcher concluded that a General Inductive Approach (Thomas, 2006), as described in section 2.7.4 would be more suitable for coding the current qualitative data to derive thematic content.

2.7.4 Development of Themes in General Inductive Approach

The qualitative information analytical strategy was derived from a General Inductive Approach to data analysis (Thomas, 2006). The main reason for using this approach is that it allows findings to emerge from themes in the raw data that are dominant and significant without imposing any restraints seen in more structured qualitative methods, such as Grounded Theory (Strauss & Corbin, 1990). Grounded Theory focuses more on qualitative information from interviews in which data is thematically coded line by line to produce a number of units of meaning that are then grouped as themes and used to guide questioning in future interviews. Given the fact that there was only

information from one focus group, it was deemed more suitable to focus on the thematic coding to produce a number of overall themes generated by the focus group.

As with many types of qualitative data analyses, one of the primary underlying assumptions of a General Inductive Approach is that analysis takes the form of category development, taking the raw data and creating a framework that highlights key themes that emerge, therefore reducing the amount of raw data into definable key themes (Thomas, 2006). This method of developing themes has been used by researchers aiming to report analyses of qualitative data when they are unfamiliar with more traditional approaches or when the main aim is to derive thematic content from large amounts of information (Dey, 1993). Within the social science field, a number of studies have used the thematic approach, without explicitly designating their analysis as a General Inductive Approach, simply describing how themes emerged. Jain and Ogden (1999) described carrying out analysis by using "...a coding frame...this process was used to develop categories...conceptualised into broad themes..." (p.1597). Elo and Kynge (2008) state that "inductive content analysis is used in cases where there are no previous studies dealing with the phenomenon..." (p.107).

The data coding was carried out following guidance on data handling practices from Ritchie and Lewis (2003), which includes initial coding to identify themes, second layer coding to highlight broader themes and a third layer of coding practices to move from the initial idea to an explanation of themes. To do this, the transcripts were rigorously and systematically read a number of times, in order that the data could be categorised and coded depending on how themes developed. These categories were developed by looking at each individual segment of text, in this instance sentence by sentence and assigning this with a specific category label. This continued for each text segment, with subsequent segments being placed in the category label that was most appropriate. If no existing category label was deemed appropriate, a new label was developed. This continued until the end of the transcribed data and the existing category labels were then coded using the same procedure to create broader labels. This allowed the researcher to develop a hierarchical coding framework in which categories of information could be linked together and eventually summarised into broad themes. These themes were then categorised according to the framework until no new themes

emerged from the data, suggesting that the information had reached a natural point of saturation; with a General Inductive Approach this results in 3 – 8 major themes (Thomas, 2006). An overview of the coding process can be seen in figure 2.2:

Figure 2.2. Process of coding in the General Inductive Approach

Initial text readings	Identify text segments	Label segments to develop categories	Reduce overlapping categories by combining	Develop framework most important categories and combine
Numerous raw data	Create numerous segments for coding	Approximately 30-40 categories	Approximately 15-20 categories	Approximately 3-8 categories

Taken from Creswell (2002)

2.7.5 Saturation and Validity

To show that validation was achieved, through the process of analysis the themes that emerged from group members early in the discussion were carried throughout the remainder of the focus group. It can also be seen that different participants in the focus group provided information on the main themes, which helped to provide a range of responses which would add dimensions to the themes. These themes were also rated independently by a member of a peer qualitative supervision group, who was provided with a copy of these transcripts.

It should be noted that the researcher is aware that the validity of the conclusions could have been further established by carrying out subsequent focus groups to assess whether the same themes emerged from different participants and from those who may have had different experiences of services in other Health Board areas. This is discussed in more detail in section 4.6 Limitations to the Study.

2.7.6 Inter-Rater Reliability

To ensure reliability of the themes taken from the qualitative data, the researcher was part of an ongoing qualitative peer supervision group which looked generally at the processes involved in carrying out and analysing qualitative research. This ensured that the researcher was aware of issues surrounding coding and extracting themes from transcribed data.

To further ensure reliability of the thematic content of the data, peer group members provided each other with a copy of a transcription of the qualitative information and carried out thematic coding. These were then compared against the researcher's original coding to ensure reliability was maintained and that similar themes were found when coding the data, which was the case. Both raters found similar emerging themes from the data and reached a point at which information appeared saturated as no more themes could be developed from the data.

3. RESULTS

3.1 PSI Quantitative Results

Of the 203 PSI questionnaires sent out to statutory (n=103) and voluntary/community (n=100) sectors, 70 were returned, fully completed, giving an overall response rate of 34.5%. The response rate for statutory sector (n=48) was 46.6%, whilst the response rate for the voluntary/community sector (n=22) was 22%.

3.1.1 Demographic Information

Demographic information was collated for all respondents to provide an overview of the characteristics of those responding to the PSI questionnaire. Information obtained looked at position within the organisation, academic credential, own recovery status, number of years spent working in the addictions field, previous participation in incentive programmes and whether this involved tangible, social or both types of incentive. This information is presented in the tables below.

Table 3.1. Demographic information on position within the organisation

	Statutory		Voluntary/Community	
	N	Sector %	N	Sector %
Doctor/Psychiatrist	5	10.4		
Nursing Staff	19	39.6		
Psychologist/Trainee	9	18.8		
Key-worker	8	16.7	7	31.8
Support Worker			9	40.9
Admin Support	4	8.3		
Project Manager	2	4.2	4	18.2
Other	1	2.1	2	9.1

The majority of respondents in the statutory sector were from a Nursing background, whilst in the voluntary/community sector the majority of respondents were support workers. Of those respondents

describing their position within the organisation as “other”, this included the title “family worker” for those within the voluntary/community sector. No information was provided by respondents for “other” in the statutory sector.

Table3.2. Demographic information academic credentials

	Statutory		Voluntary/Community	
	N	%	N	%
M.D/Psychiatric Qualification	5	10.4		
D.Clin.Psychol/PhD	5	10.4		
MSc/MPhil	8	16.7		
BA/BSc	18	37.5	3	13.6
Diploma of Higher Ed.	6	12.5	5	22.7
High School	2	4.2	1	4.6
Other	4	8.3	13	59.1

The majority of respondents from the statutory sector described themselves as having a BA/BSc degree, whilst the majority of respondents from the voluntary/community sector described their credentials as “other.” Of the statutory sector staff describing their academic credentials as “other,” these were specified as “Registered Mental Health Nurse (RMN).” Of the voluntary/community sector respondents describing their academic credentials as “other,” this comprised Registered Mental Health Nurse (RMN), Higher National Certificate (HNC) Social Care, Scottish Vocational Qualification (SVQ) Social Care, CBT Diploma and Certificate in Counselling Skills.

Table 3.3. Demographic information on number of years in addiction field

	Statutory		Voluntary/Community	
	N	%	N	%
2 or fewer	12	25.0	3	13.6
> 2 – 7 years	21	43.8	8	36.4
> 7 – 12 years	4	8.4	4	18.2
>12 years	11	22.9	7	31.9

The majority of participants in the statutory and voluntary/community sectors had worked in the field of addictions more than 2 and up to 7 years.

Table 3.4. Demographic information on respondents in recovery from substances

	Statutory		Voluntary/Community	
	N	%	N	%
Yes	4	8.3	1	4.6
No	44	91.7	21	95.4

In both the statutory and voluntary/community sectors, the majority of respondents described themselves as not being in recovery from substance abuse.

Table 3.5. Demographic information on previous participation in incentive programmes

	Statutory		Voluntary/Community	
	N	%	N	%
Yes	6	12.5	6	27.3
No	42	87.5	16	72.7

The majority of statutory and voluntary/community respondents had no previous experience participating in either tangible or social incentive programmes.

Table 3.6. Demographic information on type of incentive programme previously participated in

	Statutory		Voluntary/Community	
	N	%	N	%
Tangible	1	2.1	1	4.6
Social	3	6.3	4	18.2
Both	2	4.2	1	4.6

Of those participants stating previous involvement in incentive programmes, in both statutory and voluntary/community sectors, the main incentive type used was a social programme.

3.1.2 Demographic Analysis

3.1.2.1 Mean Responses to Unique Tangible and Social Incentives by Job Position

Table 3.7. Mean responses to unique tangible and social items by job position

Job Position	Mean Response	
	Tangible Incentives	Social Incentives
Doctor/Psychiatrist	3.72	3.70
Addictions Nursing Staff	3.57	3.86
Psychologist/Trainee	3.89	4.28
Addictions Key-worker	3.65	3.98
Addictions Support Worker	3.85	4.12
Administrative Support	3.37	3.94
Project Manager	3.53	3.92
Other	3.43	3.92

The results above indicate the mean agreement rating for all participants within each job position. Agreement ratings on the PSI ranged from 1 (strongly disagree) indicating a negative response, to 5 (strongly agree) indicating a positive response. As such, responses for unique tangible and social item agreement ratings on questions 1, 2, 3, 5, 7, 9, 11, 12, 13 and 14 were reverse scored prior to analysis, therefore higher responses on all questions would indicate a greater level of agreement. Reverse scoring was carried out for unique tangible and social items and this is reflected in all tables reporting data on the unique items. Throughout the paper, the term “agreement” is defined as a participant response of 4 or 5 on the Likert scale, taking into account those questions which were reverse scored. The results show that overall, participants mean responses indicate they are either neutral or more in agreement with incentive programmes than not, as the majority of responses tended to be towards the more positive level of response. It is evident from the above results that within substance misuse services, Psychologists and Trainee Psychologists are more likely to agree with both tangible and social incentive programmes, with the highest mean responses of 3.89 and 4.28, respectively. This is followed, for both tangible and social incentives, by Addiction Support Workers who showed a mean response of 3.85 and 4.12 respectively. The lowest level of agreement for tangible incentives came from administrative support staff, with a mean response of 3.37, whilst for social incentives the lowest level of agreement came from Doctors/Psychiatrists, with a mean response of 3.70, both of which were more within the neutral and positive ranges.

3.1.2.2 Mean Responses to Unique Tangible and Social Incentives by Academic Credentials

Table 3.8. Mean responses to unique tangible and social incentives by academic credentials

Academic Credential	Mean Response	
	Tangible Incentives	Social Incentives
MD/Psych Qualification	3.72	3.70
D.Clin.Psychol/PhD	3.72	4.00
MSc/MPhil	3.91	4.08
BA/BSc	3.63	3.97
Diploma of Higher Ed.	3.61	3.96
Other Addictions Certificate	3.57	4.04
High School	3.63	3.92
Other	3.43	3.97

The results highlight that those respondents with MSc/MPhil degree qualifications were more likely to have higher agreement responses for both tangible and social incentives than those with other academic credentials, with mean responses of 3.91 and 4.08, respectively. Those with the lowest agreement responses for tangible incentives described their credentials as “other,” with a mean response of 3.43. Those with the lowest agreement responses for social incentives were those who held medical or psychiatric qualifications, with a mean response of 3.70.

3.1.2.3 Mean Responses to Unique Tangible and Social Incentives by Years in Addictions Field

Table 3.9. Mean responses to unique tangible and social incentives by years in addictions field

Years in Addictions Field	Mean Responses	
	Tangible Incentives	Social Incentives
2 years or fewer	3.65	3.95
>2 -7 years	3.73	4.08
>7 – 12 years	3.48	3.81
> 12 years	3.57	3.86

The agreement ratings show that participants working in the field of addictions for more than two years and up to 7 years were more likely to agree with both tangible and social incentive programmes, with mean responses of 3.73 and 4.08, respectively. Those with the lowest agreement ratings for tangible and social incentives were shown to be those who had worked in the field of addictions for more than 7 and up to 12 years, with mean responses of 3.48 for tangible and 3.81 for social incentives.

3.1.2.4 Mean Responses to Unique Tangible and Social Incentives by Recovery Status

Table 3.10. Mean responses to unique tangible and social incentives by recovery status

Recovery Status	Mean Responses	
	Tangible Incentives	Social Incentives
In Recovery	3.58	3.94
Not In Recovery	3.69	3.97

The mean responses by participants suggest that those describing themselves as not in recovery from substance misuse had higher agreement responses to both tangible and social incentive programmes, with mean responses of 3.69 and 3.97.

3.1.2.5 Mean Responses to Unique Tangible and Social Incentives by Previous Experience of Incentive Programmes

Table 3.11. Mean responses to unique tangible and social incentives by previous experience of incentive programmes

Previous Experience	Mean Responses	
	Tangible Incentives	Social Incentives
Participated	3.66	3.96
Not Participated	3.64	3.97

Results suggest that whether individuals had previously participated in incentives programmes or not, they showed higher agreement to social incentives than to tangible incentives, with mean responses of 3.96 for those who had participated and 3.97 for those who had never previously participated.

3.1.2.6 Mean Responses to Tangible and Social Incentives by Type of Programme Participated in

Table 3.12. Mean responses to tangible and social incentives by type of programme participated in

Type of Programme	Mean Responses	
	Tangible Incentives	Social Incentives
Tangible	3.80	3.86
Social	3.71	4.03
Both	3.50	3.87

Results of mean responses to type of incentive by previous participation, indicates that overall there were higher agreement responses for social incentive programmes, regardless of whether previous experience was with tangible or social incentive programmes.

3.1.2.7 Analysis of Demographic Information for Overall Attitude towards Tangible and Social Incentives

A range of mixed model ANOVA's were carried out to analyse the differences in participant attitudes towards tangible and social incentives, based on the treatment provider characteristics of staff group (statutory or voluntary), job position within their organisation, level of academic credentials, number of years working in the substance misuse field, own recovery status and previous experience working with incentive programmes. All effects are reported as significant at $p < 0.05$.

There was no significant main effect of overall opinion based on whether participants belonged to a statutory or voluntary group, $F(1,68) = 2.54$, $p > 0.05$, however there was a significant main effect of overall views based on incentive type, $F(1,68) = 28.71$, $p < 0.05$. It was indicated that both statutory and voluntary respondents showed higher overall positivity towards social rather than tangible incentives. The highest level of positive opinion for tangible incentives was from statutory staff ($M = 98.69$, $SD = 17.99$), whilst voluntary staff showed less positivity ($M = 93.18$, $SD = 12.12$). In relation to social incentives, statutory staff showed a higher overall level of positive opinion ($M = 106.77$, $SD = 15.47$), whilst voluntary staff showed less positivity ($M = 100.50$, $SD = 11.26$). There was no significant interaction effect between the group that members belonged to and type of incentive, $F(1,68) = 0.07$, $p > 0.05$, showing that overall opinion of incentives of different types did not differ according to group.

With regards to participant's job position, there was no significant main effect of overall opinion towards incentive type based on respondent's job, $F(1,62) = 1.86$, $p > 0.05$, however there was a significant main effect of overall opinion towards incentive type, $F(1,62) = 19.79$, $p < 0.05$. This indicates that overall there was more positive opinion for social rather than tangible incentives. The highest overall positive opinion for tangible incentives was from Clinical and Trainee Clinical

Psychologists, ($M = 108.22$, $SD = 12.31$), whilst the lowest level of positive opinion was from those describing their job as “other”, ($M = 81.33$, $SD = 11.02$). For social incentives, results show that Clinical and Trainee Clinical Psychologists showed most positivity for this type of reward, ($M = 118.11$, $SD = 12.78$), whilst the lowest level of positivity was from those whose job was “other”, ($M = 90.33$, $SD = 18.00$). There was no significant interaction effect between job position and incentive type, $F(7,62) = 0.49$, $p > 0.05$, showing that overall opinion of incentives of different types did not differ according to job position.

In looking at participant’s qualifications, there was a significant main effect of academic credentials on overall opinion expressed by respondents, $F(1,62) = 2.31$, $p < 0.05$ and also a significant main effect of incentive type on participant’s opinions, $F(1,62) = 18.39$, $p < 0.05$. This indicates that respondent’s were more in favour of social rather than tangible incentives, with the highest positive opinion for tangible rewards from those with MSc/MPhil qualifications, ($M = 107.22$, $SD = 17.29$), whilst those holding “other addictions certificates” had the lowest positive opinion, ($M = 85.83$, $SD = 12.55$). For social incentives, those with D.Clin.Psychol and PhD qualifications showed higher positive opinions, ($M = 114.80$, $SD = 9.20$), whilst those with “other addictions certificates” showed the lowest positive opinion, ($M = 92.67$, $SD = 13.09$). There was no significant interaction effect between academic credentials and incentive type, $F(7,62) = 1.01$, $p > 0.05$, showing that overall opinion of different incentive types did not differ according to academic credentials.

In relation to number of years participants had worked in the addictions field, there was no significant main effect of time spent working in addictions on overall opinion expressed by respondents, $F(1, 66) = 0.17$, $p > 0.05$, however there was a significant effect of incentive type on opinion of participants, $F(1,66) = 37.44$, $p < 0.05$. This indicates that participant’s were more in favour of social rather than tangible incentives, with the highest positive opinion for tangible rewards from those who had worked in the field for more than 12 years, ($M = 100.17$, $SD = 18.52$), whilst the lowest positive opinion was from those who had worked in the field for more than 7 but less than 12 years, ($M = 91.88$, $SD = 15.15$). For social incentives, the highest positive opinion was from those who had been working in the addictions field for less than 2 years, ($M = 106.07$, $SD = 7.88$), whilst the lowest positive opinion

came from those who had worked in the field for more than 12 years, ($M = 103.33$, $SD = 15.00$). There was no significant interaction effect between years working in the addictions field and incentive type, $F(3,66) = 2.46$, $p > 0.05$. This shows that overall opinion of incentives of different types did not differ according to years spent working in addictions.

It was also shown that there were no significant main effects of own recovery status, $F(1,68) = 0.29$, $p > 0.05$, or previous experience of incentive programmes, $F(1,68) = 0.41$, $p > 0.05$, on overall opinion of respondents. However, on both measures, there were significant effects of incentive type on participant's opinion, $F(1,68) = 7.14$ and $F(1,68) = 26.05$, $p < 0.05$, respectively. It was indicated that respondents were more in favour of social incentives rather than tangible. The highest positive opinion for tangible rewards were from those in recovery, ($M = 101.00$, $SD = 10.42$) and those with no previous incentive experience, ($M = 97.73$, $SD = 16.74$). The lowest positive opinions for tangible rewards were from those not in recovery, ($M = 96.71$, $SD = 16.81$) and those with previous experience of incentive programmes, ($M = 93.86$, $SD = 15.64$). For social incentives, those in recovery had the highest positive opinion, ($M = 108.50$, $SD = 4.51$), as did those with no previous incentive experience, ($M = 105.14$, $SD = 14.49$). Those who were not in recovery had the lowest positive opinions, ($M = 104.58$, $SD = 14.87$) as did those with previous incentive experience, ($M = 103.43$, $SD = 15.00$). There were no significant interaction effects between recovery status and incentive type, $F(1,68) = 0.00$, $p > 0.05$ or previous experience and incentive type, $F(1,68) = 0.42$, $p > 0.05$, showing that overall opinion of different incentive types did not differ according to recovery status or previous experience.

3.1.3 Unique Tangible and Social Items

To compare differences between the views of statutory and voluntary/community responses to level of agreement within the unique tangible and social items (questions 1-14), a mixed model ANOVA was carried out to analyse the between subject factor of statutory versus voluntary/community and the within subject factor of tangible incentive versus social incentive. As previously described,

agreement ratings on questions 1, 2, 3, 5, 7, 9, 11, 12, 13 and 14 were reverse scored prior to this analysis.

3.1.3.1 Statutory versus Voluntary/Community

There were no significant main effects of response of statutory and voluntary/community groups on unique items, $F(1,68) = 0.35$, $p > 0.05$. For tangible measures, statutory mean agreement response was $M = 3.63$, compared to voluntary/community $M = 3.69$. For social measures, statutory mean was $M = 3.96$, compared to voluntary/community $M = 3.98$.

3.1.3.2 Tangible versus Social Incentives

In looking at the differences within responses to tangible and social incentives, there is a significant main effect of agreement response to unique tangible and social items, $F(1,68) = 27.7$, $p < 0.05$. Mean agreement response for tangible items was $M = 3.66$ compared to social, $M = 3.97$. This was similar to the results of Kirby *et al.* (2006) who found that their sample showed more positive beliefs overall for social incentives. The difference in means for tangible and social incentives in the American sample were reported in their paper as $M_s (3.55) - M_t (3.38) = 0.17$. In keeping with this representation of mean agreement responses, the difference in means in the Scottish sample were $M_s (3.97) - M_t (3.66) = 0.31$. This shows that the Scottish sample had higher mean agreement responses to both tangible and social incentives compared to the American sample and that the differences in agreement between tangible and social incentives was higher in the Scottish sample. This data was not published for the Australian (Ritter & Cameron, 2007) sample.

There were no significant interaction effects of group and incentive variables $F(1, 68) = 0.16$, $p > 0.05$, showing that overall opinion of unique incentive types did not differ according to group.

In looking item-by-item at the responses to the 6 unique items looking at affordability of tangible incentive programmes, results show that of the overall sample, only 22.9% of respondents felt that

programmes costing £100 were worth considering and 85.7% felt that their service could not afford to implement an incentive programme costing £100 per client per month. For incentive programmes costing £35 per client per month, of the overall sample, 38.6% felt that these were worth considering, however, 70.0% responded that their service could not facilitate the funds for this type of incentive programme. For programmes costing £5 per client per month, of the overall sample, 47.1% felt that these were worth considering, however 40.0% felt that their service would not be able to meet the cost of this per client, per month. These results can be seen more clearly in the following graphs.

Figure 3.1. Responses to “tangible incentive programmes that cost £100, £35 and £5 per client per month are worth considering”

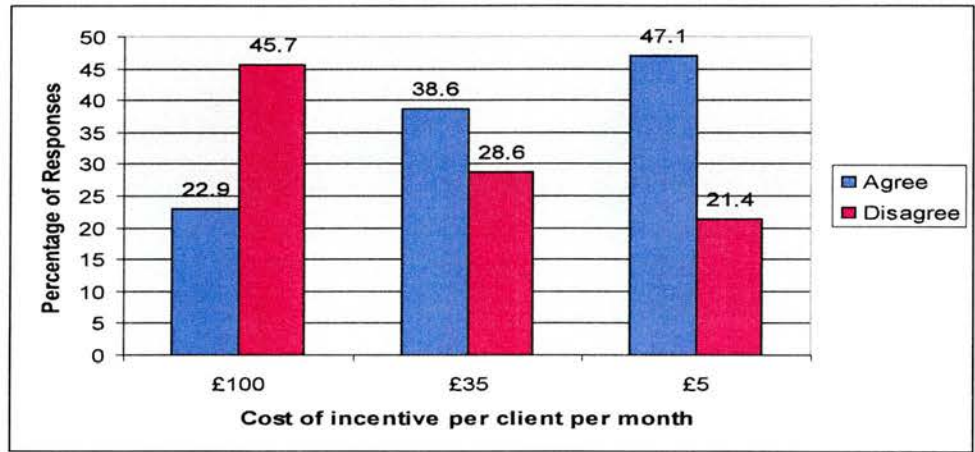
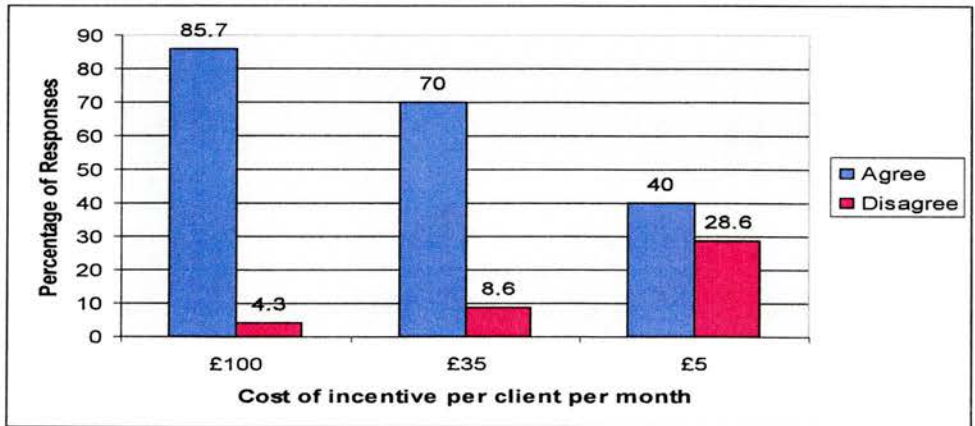


Figure 3.2. Responses to “my treatment facility could not find funds for tangible incentives that cost £100, £35 and £5 per client per month”



In relation to the 4 remaining items on the unique tangible scale, item-by-item, it was found that 47.1% of respondents agreed that giving incentives to clients who have earned them and not others

would result in arguments between peers. Meanwhile 28.6%, nearly a third of respondents, believed that clients would be likely to sell any tangible incentives that they earned, whilst 48.6% agreed that if they did sell these incentives, it would be to continue their substance abuse, indicating negative views of CM implementation. Finally, 42.9% of respondents agreed that tangible incentives were a worthwhile consideration as they encourage clients to initially engage with treatment services. The following table highlights these results in comparison to the findings of the sample responses found by Kirby *et al.* (2006). This information was not published in the Australian study.

Table 3.13. Comparison of Scottish and American agreement responses to unique tangible items

Question	% Agreed	
	SCO	US
1. If you give tangible incentives to clients who've earned them but not to others it will results in clients arguing about rewards	47.1	35.5
2. Most clients would sell the tangible incentives they receive	28.6	14.4
3. Clients who sell their tangible incentives will use the money to continue their substance abuse	48.6	30.0
10. Tangible incentives are worthwhile as they can get clients in the door for treatment	42.9	44.6

These results show the Scottish sample hold more negative views on: the use of tangible incentives causing arguments amongst peers, incentives being sold and incentives being sold to continue substance misuse, than the American sample. Furthermore, the Scottish sample were less positive than the American sample in believing that tangible incentives can get clients through the doors to access treatment.

In looking item-by-item at the results of the unique social items, it was found that only 25.7% , more than a quarter, of respondents felt that using incentives such as social praise would become artificial over time and result in the approach being ineffective. Furthermore, only 22.9% of the sample agreed that the use of social praise could result in a negative client-counsellor relationship as the treatment progressed. Of the sample, 35.7% agreed that there was no need for structured social incentive

programmes as therapists already praise accomplishments. In relation to the use of verbal warnings being more effective than social incentives in getting clients to achieve abstinence, 17.1% of respondents agreed with the effectiveness of this approach over the use of incentives. The following table highlights these results in comparison to the findings of the sample responses found by Kirby *et al.* (2006). This information was not published in the Australian study.

Table 3.14. Comparison of Scottish and American agreement responses to unique social items

Question	SCO	% Agreed	US
11. Giving social praise and reinforcement may become artificial making the incentive programme ineffective	25.7		25.3
12. Giving social praise and reinforcement may become artificial resulting in a negative effect on client-counsellor relationship	22.9		16.4
13. It is not necessary to use structured praise as therapist already praise accomplishments	35.7		17.0
14. Verbal warnings etc. are more effective in getting clients to achieve abstinence	17.1		14.4

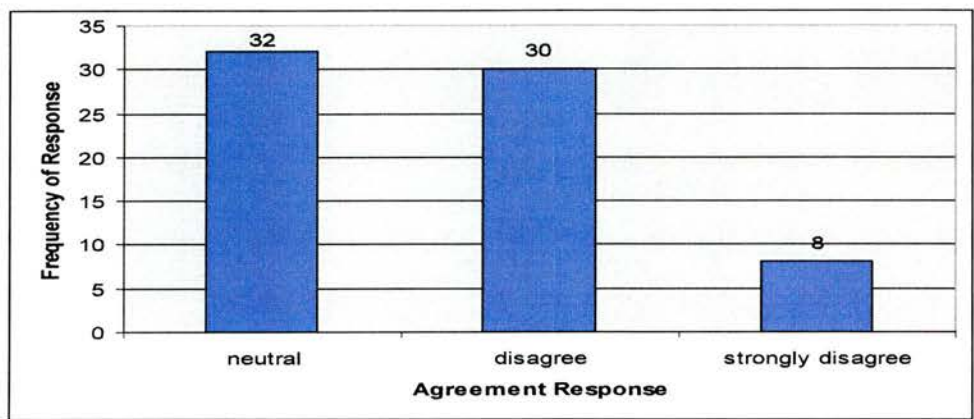
This highlights that more of the Scottish sample held negative opinions than the American sample in relation to the artificial effects of social incentives and the fact that incentive programmes are negated as praise is already carried out. They also showed that Scottish and American samples held similar levels of belief that verbal warnings and removal of privileges were more effective methods for helping clients achieve abstinence than incentives, however again, more of the Scottish sample held negative beliefs than the American sample.

3.1.4 Other Approaches

Within the unique items on the PSI questionnaire, participants were asked to provide their responses to 2 questions pertaining to the 12-Step approach to addiction treatment. Question 15 asked participants to rate their agreement with the statement “*the incentive approach is inappropriate*

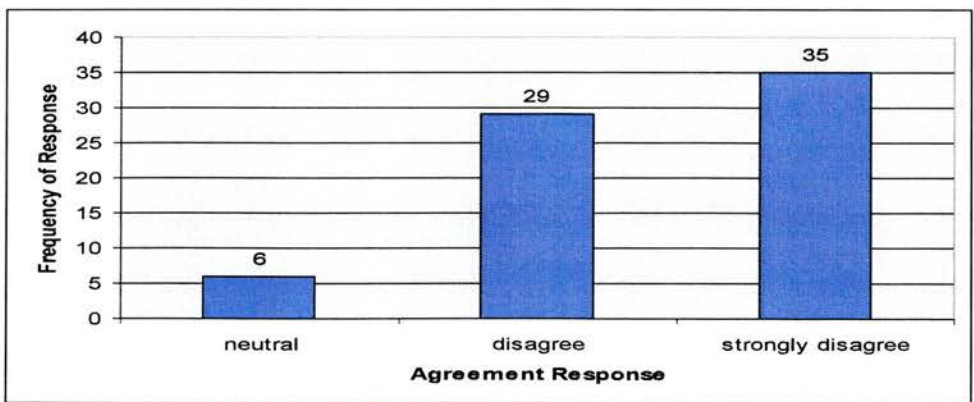
because it is inconsistent with a 12-Step approach” and Question 16 asked for agreement responses to the statement “the 12-Step approach is the only proven approach to treating addiction.” Descriptive frequencies of participant response are provided in the following graphs. Before looking at the frequencies of agreement responses to the 2 questions on the 12-Step approach, items were reverse scored.

Figure 3.3. Frequency of responses to “the incentives approach is inappropriate because it is inconsistent with a 12-step approach”



This highlights that 54.2% (n=38) of respondents do not agree that incentive programmes are inappropriate as they do not follow the principles of the 12-Step approach, whilst the other respondents (n=32) felt neutral about this statement. The results indicate that no participants felt that incentives were inappropriate due to their inconsistency with the 12-Step approach.

Figure 3.4. Frequency of responses to “the 12-step approach is the only proven approach to treating addiction”



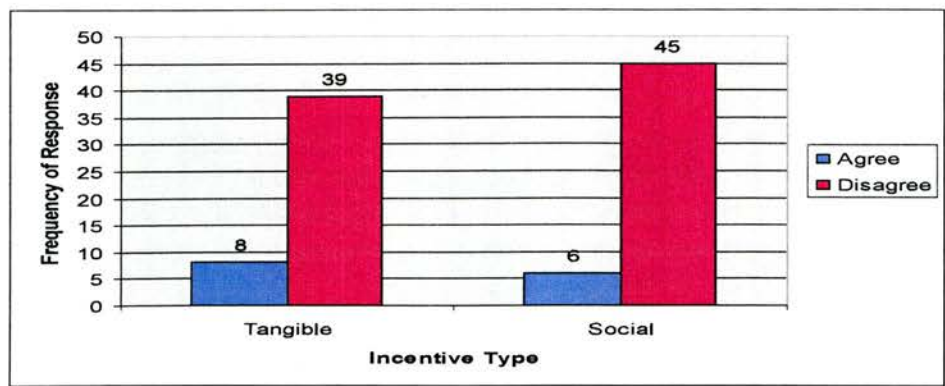
This indicates that 91.4% (n=64) of the sample disagreed with the statement that the 12-Step approach was the only proven method of treating addiction, whilst the other 8.6% (n=6) felt neutral about this statement. The results also highlight that no participants agreed that the only proven means of treating addiction is the 12-Step approach.

In comparison with the American sample responses provided by Kirby *et al.* (2006), it was shown that in relation to the idea that incentive programmes were inappropriate as they are not consistent with the 12-Step approach, the American sample held stronger objections to this statement than the Scottish sample, with 88.5% of American's disagreeing with this, compared to 54.2% of Scots. In looking at the concept that the 12-Step approach is the only proven treatment for addictions, the American sample held similar objections as the Scottish sample, with 90.6% of Americans disagreeing with this, compared to 91.4% of Scots.

3.1.5 When Incentives are most useful in Treatment

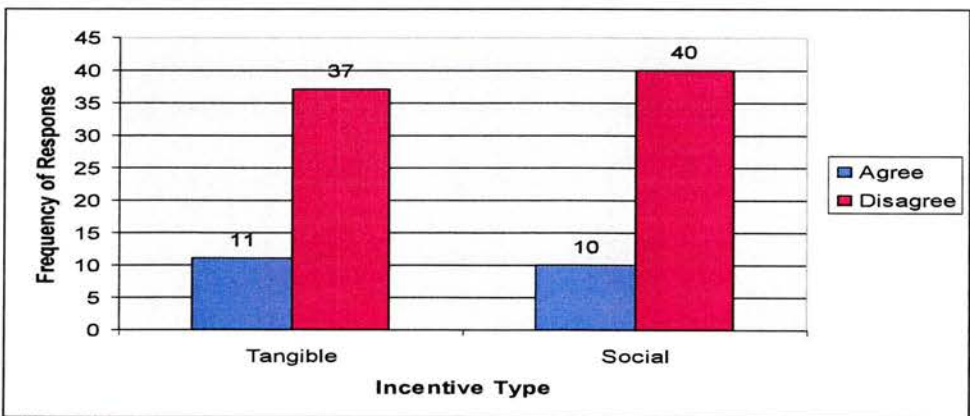
Within the PSI, 3 questions (39, 40 and 41) specifically asked participants when they felt incentives would be most useful in the treatment process. Question 39 asked respondents to rate their agreement, for both tangible and social incentives, with the statement "*Incentives are only useful at the beginning of treatment.*" Participant responses indicate that only 11.4% (n= 8) agree that tangible incentives are only useful at the beginning of treatment, whilst 8.6% (n=6) believe that social incentives are only useful at the beginning of treatment. Those disagreeing with the statement show that for tangible incentives 55.7% (n=39) did not agree and for social incentives 64.3% (n=45) did not agree that incentives were only useful at the beginning of treatment. These responses are shown in the following graph; remaining participants provided a neutral response.

Figure 3.5. Responses to “incentives are only useful at the beginning of treatment”



Question 40 asked respondents to rate their agreement, for both tangible and social incentives, with the statement *“Incentives are only useful after someone is already established in treatment.”* Participant responses indicate that 15.7% (n=11) agree that tangible incentives are only useful after someone is already established in treatment, whilst 14.3 (n=10) believe that social incentives are only useful after someone is already established in treatment. The results show that of participants disagreeing, 52.9% (n=37) disagreed with the statement in relation to the use of tangible incentives, whilst 57.1% (n=40) disagreed with the statement in relation to social incentives. These responses are shown in the following graph; remaining participants provided a neutral response.

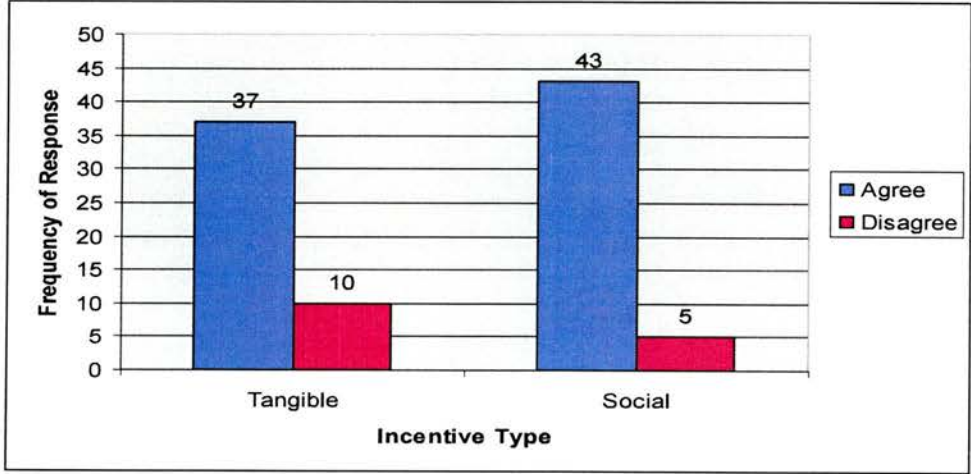
Figure 3.6. Responses to “incentives are only useful after someone is already established in treatment”



Question 41 asked respondents to rate their agreement, for both tangible and social incentives, with the statement *“Incentives are most useful if they’re used throughout treatment.”* Participant

responses indicate that 52.9% (n=37) agree that tangible incentives are most useful if they're used throughout treatment, whilst 61.4% (n=43) believe that social incentives are most useful if they're used throughout treatment. Of those disagreeing, 14.3% (n=10) disagreed in relation to the use of tangible incentives being used throughout treatment, whilst 7.1% (n=5) disagreed with the statement in relation to social incentives being used throughout treatment. These responses are shown in the following graph; remaining participants provided a neutral response.

Figure 3.7. Responses to "incentives are most useful if they're used throughout treatment"



3.1.6 Participant's Positive Attitudes towards Tangible and Social Incentives

In summary, participant responses indicated a general positivity about the implementation of incentive programmes in the substance misuse setting, in particular for social incentives.

In relation to affordability of incentive programmes, it is positive that nearly one-quarter (22.9%) of the sample felt that programmes costing as much as £100 per individual per month were worth considering, despite the fact that over three-quarters (85.7%) realised that their treatment facility could not afford this amount. It was evident that as overall cost of the programme decreased, the number of respondents who felt that incentives were worth considering increased, whilst the number of those stating that their treatment facility could not cover such costs decreased.

Specifically in relation to tangible incentives, it was positive that only one-quarter (25.7%) of the total sample, felt that these types of rewards would be sold by clients, whilst nearly half (42.9%) of all respondents felt that tangible incentives were worthwhile as it would help to engage clients with treatment services. For social incentives, it was positive that only one-quarter (25.7%) of the total sample felt that social praise would become artificial, whilst less than one-quarter (22.9%) had concerns that incentives, such as praise, would negatively impact upon the therapeutic relationship.

3.1.7 Comparison of Positive Opinions of CM

In keeping with the analyses carried out in both comparison papers, Kirby *et al.* (2006) United States (US) study and Ritter and Cameron (2007) Australian (AUS) study, percentages of Scottish (SCO) participants agreeing or strongly agreeing with the nine positive statements regarding CM were calculated. The highest agreement score, between the 3 samples, for tangible and social on each question is highlighted. This indicates the sample with the highest percentage of agreed or strongly agreed responses to the positive opinions about CM. These are presented in the following table, alongside the percentage results for the same positive opinion items collected in the United States study and the Australian study.

Table 3.15. Percentage of respondents agreeing with positive opinions of CM

	Tangible (% Agreed)			Social (% Agreed)		
	SCO	US	AUS	SCO	US	AUS
17. Overall, I would be in favour of adding an incentive programme	52.9	54.0	42.4	75.7	77.0	68.4
21. Overall, incentives are good for client/counsellor relationship	30.0	44.9	25.8	45.7	57.7	39.0
23. Incentives are more likely to have positive effects on client than negative effects	57.1	62.9	47.9	71.4	70.5	59.7
28. Incentives are useful if they reward clients for fulfilling treatment goals other than just providing a clean urine	67.1	67.1	51.5	74.3	71.3	57.7
30. Incentives help clients achieve sobriety, allowing counsellor to focus on helping them make other life changes	37.1	50.1	22.4	35.7	57.4	35.7
35. Giving incentives for drug-free urines helps clients achieve abstinence	38.6	46.0	21.1	42.9	46.7	23.2
37. An advantage of incentive programmes is that they focus on what is good in the client's behaviour	72.9	61.6	56.7	72.9	63.2	60.8
42. Any source of abstinence motivation, not just internal motivation is a good thing for treatment	65.7	73.6	55.8	72.9	74.2	58.9
47. Incentives can be useful whether or not they address the underlying issues of addiction	57.1	59.0	44.8	61.4	61.9	55.2

The results of the positive opinions indicate that overall, the Scottish sample respondents have a higher percentage of agreement responses on all items, both tangible and social, than the Australian sample. With regards to comparing the positive opinions of the United States' responses, the Scottish sample agreement percentages were slightly lower on most of the positive items. However, the Scottish sample scored higher agreement percentages than the United States sample on Question 37. *"An advantage of incentive programmes is that they focus on what is good in the client's behaviour,"* for both tangible and social items, 72.9% agreeing for both. The Scottish sample also scored the

highest agreement percentages of the 3 studies on Question 23. *“Incentives are more likely to have positive effects on the client than they are to have negative effects”*,” with 71.4% agreeing and they also showed the highest agreement percentages, for both tangible and social approaches, on Question 28 *“Incentives are useful if they reward clients for fulfilling treatment goals other than just providing a clean urine, such as regular attendance,”* with 74.3% agreeing. Overall, results suggest that in relation to both tangible and social incentive programmes, that the Australian sample hold more negative views, followed by the Scottish sample, whilst the United States sample show more positive response to both incentive programmes.

3.1.8 Comparison of Negative Opinions of CM

Percentages of the Scottish samples agreements with negative statements relating to CM practices were calculated and compared with both the United States and Australian samples. The highest agreement score, between the 3 samples, for tangible and social on each question is highlighted. This indicates the group with the highest percentage of agreed or strongly agreed responses to the negative opinions about CM. These are presented in the following table.

Table 3.16 Percentage of respondents agreeing with negative opinions of CM

	Tangible (% Agreed)			Social (% Agreed)		
	SCO	US	AUS	SCO	US	AUS
18. If the client is abstinent just to get the incentive it could hurt the treatment process	47.1	33.2	40.4	34.3	26.6	31.6
19. Many clients will see rewards for abstinence as cheesy or artificial	28.6	21.9	35.0	34.3	18.8	35.4
20. Incentives are not right as they reward the client for what he/she should be doing in the first place	24.3	15.7	17.2	14.3	10.7	14.4
22. Overall, incentives have a negative effect on client/ counsellor relationship	20.0	12.3	24.3	5.7	7.0	16.5
24. Incentives are more likely to have negative effects on the client than positive effects	12.9	11.7	24.2	2.9	5.4	14.4

	Tangible (% Agreed)			Social (% Agreed)		
	SCO	US	AUS	SCO	US	AUS
25. Incentives will cause jealousy among clients who don't get them	57.1	39.2	31.4	25.7	31.9	28.6
26. It wouldn't be right to give incentives to clients for goals such as attendance if they aren't testing drug negative	40.0	42.3	17.3	31.4	39.4	15.5
27. It wouldn't be right to give incentives to someone for being clean if they aren't fulfilling other treatment goals	32.9	50.4	21.3	28.6	44.6	16.3
29. Incentive programmes that require urinalysis at least once a week are not practical	58.6	27.7	52.0	57.1	27.9	49.4
31. Incentive programmes are not consistent with my philosophy of treatment	34.3	22.2	-----*	20.0	14.4	-----*
32. Incentives will stop the client seeing beyond external rewards and prevent them from realising their internal motivation	37.1	23.5	35.5	21.4	13.3	24.0
33. Incentives are a bribe	47.1	29.8	41.2	27.1	18.5	30.2
34. A problem with incentives is that abstinence will only last for as long as incentives are given	31.4	22.2	14.5	12.9	15.4	11.3
36. Giving incentives for treatment attendance will not improve attendance	12.9	15.9	19.6	10.0	15.7	19.6
38. Consistently providing clients with incentives is likely to push them back into denial	14.3	11.5	11.3	10.0	7.3	9.3
43. Incentive programmes that require close tracking of client behaviour are too labour intensive to incorporate	44.3	29.5	41.9	38.6	28.2	36.2
44. Incentives are not useful for short-term treatments i.e. one month or less	25.7	17.5	12.5	15.7	13.6	11.5
45. There are enough rewards in being clean; incentives aren't necessary	25.7	16.4	25.2	15.7	13.1	22.1
46. Incentives don't address underlying issues of addiction	74.3	52.2	64.6	67.1	47.0	58.9

*----- indicates that data was omitted from original study

The results of agreement responses to negative opinions about CM indicate the Scottish sample showed the least percentage of agreement responses of all 3 samples on tangible Question 36 *"Giving incentives for treatment attendance will not improve attendance,"* with 12.9%. They also showed the lowest agreement percentage with the parallel social response to Question 36, with 10% agreement. The Scottish sample also showed the least percentage of agreement responses on social items, Question 22. *"Overall, incentives have negative effects on the client/counsellor relationship,"* Question 24. *"Incentives are more likely to have negative effects on the client than they are to have positive effects"* and Question 25. *"Incentives will cause jealousy among clients who don't get them,"* with 5.7%, 2.9% and 25.7%, respectively. This indicates that of the 3 samples, the Scottish group had least concerns about these factors in relation to incentive programmes.

With specific regards to tangible incentives, the Scottish sample showed the strongest agreement, of all 3 groups, on negative questions: 18, 20, 25, 29, 31, 32, 33, 34, 38, 43, 44, 45, and 46. The 5 highest negative agreement percentages in the Scottish sample were Question 46 *"Incentives don't address the underlying issues of addiction,"* at 74.3%, followed by Question 29 *"Incentive programmes that require urinalysis at least once a week are not practical because most programmes do not take weekly urines on all clients,"* at 58.6% agreement. On Question 25 *"Incentives will cause jealousy among clients who don't get them,"* the Scottish sample showed 57.1% agreement. Finally, Question 18. *"If the client is abstinent just to get the incentive, it could hurt the treatment process"* and Question.33 *"Incentives are a bribe,"* both scored 47.1% in agreement responses. These results show the factors related to tangible incentive programmes that the Scottish sample had the strongest objection about.

In relation to social incentives, the Scottish sample showed the strongest agreement, of all 3 groups, on negative questions: 18, 29, 31, 38, 43, 44 and 46. The 5 highest negative agreement percentages in the Scottish sample were Question 46 *"Incentives don't address the underlying issues of addiction,"* at 67.1% agreement. This was followed by Question 29 *"Incentive programmes that require urinalysis at least once a week are not practical because most programmes do not take weekly urines on all clients,"* at 57.1% agreement and Question 43 *"Incentive programmes that require close*

tracking of client behaviour are too labour intensive to incorporate in our programme," which scored an agreement response of 38.6% Question 18 *"If the client is abstinent just to get the incentive, it could hurt the treatment process,"* scored 34.3% in agreement responses. Finally, the next highest negative agreement response was scored on Question 31 *"Incentive programmes are not consistent with my philosophy of treatment,"* with an agreement level of 20.0%. Despite being the 5 highest negative agreement scores for social items, only Questions 46 and 29 showed agreement scores from more than half of the Scottish sample. These results show the factors related to social incentives that the Scottish sample had the strongest objections about.

3.1.9 Barriers to CM Implementation

Participant responses indicated a number of concerns and negative opinions towards the tangible and social incentives utilised in CM programmes, which, as previously stated, is the main barrier in services implementing such treatment approaches in their facilities.

In particular, participants indicated that their main concerns were that despite the introduction of these programmes, they will do little to help clients address the underlying reasons behind their addiction problems. A further barrier to implementation, as indicated by participant responses, was the burden on staff to manage the work required to carry out thrice weekly urinalysis and close monitoring of client behaviours in order to provide the agreed upon reward.

Participants also indicated that they had concerns over CM implementation, in particular with the introduction of tangible incentives, as they were worried that this could lead to jealousy amongst clients who did not meet their goals and did not receive their rewards. In relation to the implementation of tangible incentives, participants also indicated that they had concerns that this type of reward could be viewed as an attempt to bribe clients and that this may ultimately damage the treatment process, if the client was only aiming for abstinence to achieve a reward of monetary value, such as vouchers or cash.

3.2 Focus Group Qualitative Analysis

Analysis of the qualitative data was in keeping with the process of inductive coding, described by Ritchie and Lewis (2003) (see Appendix 11 and Appendix 12 for transcript excerpt and first layer coding). The first layer, explorative coding, resulted in the emergence of approximately 30 different thematic categories. Second layer coding involved grouping together similar ideas and contents into approximately 18 sub-themes. For example, sub-themes described by participants, such as, “incentives are open to manipulation” and “over-utilisation of incentives” were grouped together within the over-arching theme of potential drawbacks of incentive programmes. These groupings allowed for the emergence of three main over-arching themes: psychological positives of social incentives, potential drawbacks of incentive programmes and service related concerns, each with a number of sub-themes, as described.

Table 3.17 Identified Themes and Sub-themes from Focus Group Discussion

Theme	Sub-Theme
3.2.1 Psychological Positives of Social Incentives	<ul style="list-style-type: none">• 3.2.1.1 Encouragement of self, others and future input
	<ul style="list-style-type: none">• 3.2.1.1 Increased self-esteem
	<ul style="list-style-type: none">• 3.2.1.3 Benefits of goal setting
3.2.2 Potential Drawbacks of Incentive Programmes	<ul style="list-style-type: none">• 3.2.2.1 Potential for manipulation/abuse
	<ul style="list-style-type: none">• 3.2.2.2 Over-utilisation of incentives
	<ul style="list-style-type: none">• 3.2.2.3 Stigma associated with tangible incentives
	<ul style="list-style-type: none">• 3.2.2.4 Incentives do not address the other needs of the individual
3.2.3 Service Related Concerns	<ul style="list-style-type: none">• 3.2.3.1 Time spent with drug worker
	<ul style="list-style-type: none">• 3.2.3.2 Stage at which incentives are introduced into treatment
	<ul style="list-style-type: none">• 3.2.3.3 Types of incentive

3.2.1 Theme1 – Psychological Positives of Social Incentives

Information from participants¹ highlighted a number of sub-themes that involved the use of incentives, specifically the use of social incentives and the subsequent psychological effects participants felt these had on the individual. Second layer coding identified three sub-themes: (i) encouragement of self, others and further input (ii) increased self-esteem and (iii) benefits of goal setting.

3.2.1.1 Encouragement of Self, Others and Further Input

A number of comments emerged from the data that highlighted participants felt that the introduction of social incentives was useful in encouraging the individual throughout their treatment. Participants generally felt that given their previous circumstances and limited experiences of positive praise, that the introduction of this type of intervention would be viewed as beneficial and provide encouragement to continue with treatment and change their maladaptive behaviours:

“I’ve been used tae a lot of negatives, so when ye get a wee bit of praise, it encourages you” (Participant 8).

“Sometimes ye need somebody tae gie ye a pat oan the back” (Participant 8).

¹ It should be noted that in the following focus group quotations, there are a greater number of responses from participant 1 than other members. This is largely due to the fact that the group members were all at varying stages of abstinence and as such, some had more experience of services than others and were more vocal about these experiences. As these quotations are still representative of service users’ views they have been included, and the greater use of certain participant views has been acknowledged by the researcher.

It was also highlighted that participants felt the use of social incentives, such as praise from key-workers, would encourage the continuation of adaptive behaviours and help individuals to look for the positive steps they have taken to change their behaviours:

“...you’ve hud a kinna average week right, but see whit you’ve done in that week, you could still look at that an’ say, in that week you might not hae picked up [bought drugs] so you could get praise fur that an’ say well that’s positive...strive tae dae a wee bit mare next time” (Participant 4).

It was also felt that the use of incentives, such as certificates, showing clients had achieved their pre-determined goals, may be useful in encouraging others in their peer group to strive towards achieving their own specified goals:

“...you meet people and you’ve got your wee thingmy and you’re quite chuffed aboot it...and somebody there’s like ‘how have you got that, I’ve no got that’ because I’ve handed in 10 urines...it’s showing them ‘wait a wee minute’” (Participant 6).

In relation to encouraging the uptake of different types of support, participants felt that the use of social incentives could increase acceptance of the need for other therapeutic interventions, by enhancing their understanding of the positive rewards that could be achieved, such as accessing psychological therapies and gaining an insight into their addiction:

“...it’s through a psychologist, the only way yer gonnae get that is if ye either put down ‘OK, a part of the incentive is if ye want tae talk aboot it then ye go tae a psychologist’” (Participant 3).

“That wid be an incentive, cause see tryin’ tae see a psychologist!” (Participant 9).

3.2.1.2 Increased Self-Esteem

Focus group participants indicated that the use of social incentives, such as printed certificates, can have a positive effect on self-esteem. They felt that having something they could use to show

themselves they had started, worked through and completed something, would increase their positive feelings about themselves and their abilities. They also felt that this type of incentive helped to reinforce behavioural changes and provided a sense of belief in their own achievements, helping provide encouragement if feeling unmotivated :

“I done a day programme...it meant hee haw tae anyone else in the world this stupit wee certificate sayin’ _____done stages a’ change groups 1 and 2, but tae me, when I wis still using or on methadone, it showed that I could turn up everyday for 13 weeks and complete a course. That wee bit a paper did gie me a good wee boost” (Participant 9).

“Fae where you’ve come fae, havin’ that letter or whatever sayin’...ye huv completed somethin’, ye know ye can start somethin’, finish an’ efter, cause in that kinna life you start a lot a things but ye don’t complete them, but noo you’ve git summit that says you’ve done it. So if ye huv a doon day, even jist lookin’ at they wee things helps ye...” (Participant 4).

“Aye, it’s aw about developing yer personal and social skills” (Participant 8).

3.2.1.3 *Benefits of Goal Setting*

Finally, in looking at the benefits of social incentive programmes, participants indicated that the process of setting goals to obtain the incentive was beneficial in positively progressing towards their future. It was felt the use of goals provided clients with a purpose or task that they aimed to achieve each day. They further indicated that the achievement of smaller, short-term goals was beneficial in helping them to set out larger and longer-term life goals, such as focussing on job prospects:

“Ye need tae huv goals, ye need tae huv a purpose tae yer day” (Participant 9).

“...at the start you’re setting oot goals it the start, so yer no gonnae get the praise if you’ve no kinna achieved they goals, so as long as you achieve they goals...”(Participant 4).

“See the mare you move on, your goal will be job, house...an’ if ye manage tae get that job then higher up in that job...yer goals will jist keep movin’ and see if you keep achievien’ them the higher yer goals will keep gettin’ anaw” (Participant 4).

3.2.2 Theme 2 – Potential Drawbacks of Incentive Programmes

Second layer coding identified a number of sub-themes that were categorised as highlighting potential drawbacks and problems participants associated with incentive programmes. These were (i) potential for manipulation or abuse of programme, (ii) the over-utilisation of incentives, (iii) stigma associated with tangible incentives and (iv) incentives do not address the other needs of the individual.

3.2.2.1 Potential for Manipulation/Abuse

Focus group members openly stated that due to the nature and lifestyle of many substance users, forms of incentives such as money or vouchers with a monetary value, were likely to increase the chances of clients manipulating the service in order to achieve the reward. Participants stated this included trying to find ways to prove that pre-determined targets had been achieved when they had not and finding ways to produce clean urines, despite still using substances, if the incentive had a monetary value:

“See especially being addicts, they’re gonnae try an’ wrangle, it’s certain they’re gonnae wrangle, see even if, there’s people oan meth the noo that go intae get mare meth aff their doctor and mare Valium” (Participant 4).

“I suppose it maybe makes a little more incentive to lie if you’re getting tangible benefits...” (Participant 1).

“There’s products you can buy in the shops now...you buy it and keeps your urine clean for 24 hours...just say they’re giving you a £10 for your test, you can afford to spend a fiver on one of them and keep a fiver for yourself” (Participant 1).

3.2.2.2 Over-Utilisation of Incentives

Throughout the discussions, in particular regarding social incentives such as praise, participants talked about feeling that such verbal strategies began to feel over used in the treatment process and that it could result in the client feeling embarrassed about the situation. It was felt that drug workers would

try to praise the client at each visit, whether or not they had achieved their specific goals and that this felt artificial to the client. Participants also felt that if monetary incentives were constantly being handed out, clients would eventually be more focussed on achieving the monetary target rather than their therapeutic targets:

“...after a year the praise was just wearing thin. When I wasn’t doing anything and I was still getting praised. I felt like I could go out and kill someone, d’you know and they [drug key-workers] would still turn around and say ‘well mebbes you killed someone but d’you know the way you admitted it to the police that was really good” (Participant 1).

“I think it’s a bit embarrassing when you get a compliment” (Participant 2).

“Ye end up jist seein’ the pound signs” (Participant 7).

3.2.2.3 Stigma Associated with Tangible Incentives

Further discussions focussed on the possibility that the use of tangible incentives, especially the direct use of monetary rewards, could lead to an increase in stigma associated with drug users from the general public. Participants felt that generally the public had a negative view of substance users being given specialist treatment within the NHS and that the introduction of monetary rewards for behaviours, such as abstinence, would provoke further negative attitudes from the public:

“It can go some ways to increasing the stigma... ‘there’s the NHS wasting money geein’ drug dealers money” (Participant 9).

“Aye ‘our tax money is goin’ tae junkies...they’re getting’ free tenners,’ aye” (Participant 1).

3.2.2.4 Incentives do not address the Other Needs of the Individual

The focus group also highlighted concerns over incentive programmes being a primary intervention and the potential that this would mean less psychosocial support from drug services. It was felt that incentives would not have any effect on underlying issues around addiction, such as mental health and

that treatment services may view client's positive behaviour changes, in relation to obtaining incentives, as successful without realising that they require further support, such as psychological input, even if they are achieving specified goals:

“...you’ve no addressed the issue that, it’s jist no, you’ve got to address the underlying issue and an incentive’s no gonnae dae that. It’s a case a sittin’ down an’ talkin’ about it...” (Participant 3).

“I don’t see how giving something like that could treat the causes [of addiction]...depression or anxiety...” (Participant 1).

“...to find out why, I think that’s something that’s a lot harder and you’d have to have the motivation yourself, rather than outside motivation” (Participant 1).

3.2.3 Theme 3 – Service Related Concerns

Finally, second layer coding identified sub-themes that were categorised as relating to concerns over potential service related issues, should incentive programmes be implemented in community drug services. These included: (i) time spent with drug workers, (ii) stage at which incentives are introduced into treatment and (iii) types of incentives.

3.2.3.1 Time Spent with Drug Workers

Participants identified a number of existing service restraints in community drug treatment settings, such as not having enough time to discuss problems with key-workers. They highlighted concerns that incentive programmes could be hindered by this lack of routine. It was felt that factors such as not seeing the same worker and not having enough time to talk through issues could mean that positive behaviours were over-looked or that workers were not familiar with the goals of clients they were not designated to key-work :

“...yer seein’ someb’dy different every time ye go up” (Participant 6).

“Ye don’t get time wi’ the ____ worker...if yer wantin’ tae see a drugs worker fur any other issue, they’re like that ‘ ____ can ye make another appointment...they’re all overworked” (Participant 9).

“...what am meanin’ is that a lot a’ the time the workers huvnae got time tae sit doon an talk tae ye...I mean they’re no’ actually sittin’ doon wi ye an’ actually spendin’ time wi ye tae see how yer actually daein” (Participant 8).

3.2.3.2 Stage at which Incentives are introduced into Treatment

Discussions also looked at concerns over when incentives should be introduced into an individual’s treatment plan and whether this would be beneficial or detrimental to their progress. Participants felt that although the introduction of monetary incentives would be useful in enticing clients through the door of services, this was also the most risky time at which to provide chaotic substance users with funds for illicit drug use. It was further discussed that social incentives were useful for encouragement at the beginning of treatment, however as previously described, it was felt that this could feel artificial over time. Participants concluded that incentives need to be tailored to the preferences of the individual and their stage of abstinence and that rewards, such as travel and gym passes, may be more beneficial for those further along in the treatment process:

“I think at that stage, needles an’ that, I think it’s wrong at that point [tangible incentives]” (Participant 4).

“It would be a little bit ironic, cause at the time when it would most work, like when you’re saying right at the start you’ve got no motivation for yourself, that’s the time when the voucher or the money would be most dangerous” (Participant 1).

“...I think it’s probably got more use getting people to come to services, an incentive to get in the door...I think there’s much more use for contingency management in that area rather than in the area of getting abstinent or on the methadone” (Participant 1).

“I think it depends like sometimes what stage you’re at cause see when I first went on a methadone script, then the praise was great, cause of never had any praise and starting to do something and talking about certificates after having 10 weeks of clean tests me worker printed out all the tests and I had them on me wall...” (Participant 1).

“It works the noo in certain places, ye get a transcard if ye turn up 2 days...ye get a gym card if ye turn up and it makes a difference fur people turnin’ up” (Participant 8).

3.2.3.3 *Types of Incentives*

Following on from discussion around when incentives should be introduced into treatment, participants highlighted concerns over the type of incentives being given to substance users and again whether this would be beneficial or detrimental to their progress. It was felt that monetary rewards could potentially be damaging and could even encourage relapse or tempt clients to achieve rewards in order to fund their drug use. However, participants were positive about incentives which involved developing the abilities and skills they felt they had not been utilising or had no opportunity to develop whilst actively using drugs, such as learning about finances. They also felt that incentives which encouraged individuals to participate in social activities, such as gym passes or outdoor activities were beneficial as it encouraged socialisation with others who were abstinent or successfully managing their drug use, whilst providing a source of activity, which was helpful in alleviating the boredom that often prompted relapse back into the drug lifestyle:

“I’m quite sceptical of the actual money” (Participant 1).
“Aye...money shouldnae come intae it” (Participant 6).

“...Here’s a tenner, oh what am I gonna do now?” (Participant 1).
“Buy a bag [heroin] wi’ it!” (Participant 3).

“...see tae dae wee courses like that, budgeting skills courses an’ aw that, when a first came aff, know learnin’ how tae budget yer money, learnin’ how tae run a hoose, how tae pay bills an’ aw that” (Participant 8). “...Here’s a tenner, oh what am I gonna do now?” (Participant 1).

“[printed certificates] great cause ye can always see them up on the wall...” (Participant 6).

“Something that’s giving you activities, because if you’re coming off drugs right and you’re bored, you’ve got nowt to do, a tenner, if you can’t spend it on drugs, is it’s shit isn’t it...I could have all the money in the world and I’d still be bored with nowt to do, but if you’ve got a little activity lined up...” (Participant 1).

“...like gettin’ involved in outdoor activities, I think that would be brilliant, cause then that way yer takin’ doon the barrier of social inclusion” (Participant 9).

4. DISCUSSION

In looking at the results of the study, the following summarises and discusses the findings in relation to the three aims set out in the introduction:

- (i) is there a difference in the views of voluntary services and statutory services regarding contingency management principles, including differences between tangible and social incentives?
- (ii) is there a comparable difference between the overall views of service providers in Scotland, the United States and Australia?
- (iii) what are the views of service users regarding contingency management principles and procedures?

This is followed by a discussion on the limitations of the present study and suggestions for future research in the area of CM and substance abuse treatment.

4.1 Differences in Views of Statutory and Voluntary/Community Sector

Results of the present study found that there were no significant differences in the mean overall views of statutory and voluntary/community sector respondents regarding incentive programmes, both in their opinions of tangible and social incentives. Both sectors showed similar mean scores for unique tangible items on the PSI and similar mean scores for unique social items.

From the previous research looking at service provider characteristics, some potential reasons for overall opinions of tangible and social incentives may be that in the statutory sector, there were a higher number of participants with graduate and post-graduate level qualifications; 75% of respondents held an undergraduate level degree or above, compared to only 13.6% of

voluntary/community sector respondents. As described by Shipko and Stout (1992), those holding graduate level academic credentials and above are more likely to use creativity and abstract thinking in their views of different treatment approaches, which in this instance may include CM programmes. Furthermore, Humphreys *et al.* (1999) found that psychosocial treatment interventions were more likely to be deemed acceptable by individuals holding higher level qualifications such as graduate and post-graduate degrees.

The results of opinions on incentive programmes shown by voluntary/community sector respondents may be explained by the fact that the majority of participants, 59.1%, described themselves as holding “other” qualifications, which included social care and counselling skills certificates. Furthermore, the majority, 36.4%, of these respondents stated that they had worked in the addictions field for >2 – 7 years. As described by Humphreys *et al.* (1999), the fact that the majority of participant’s academic qualifications focus on psychological and social treatment approaches and they may have been trained and working in the addictions field during an era whose ethos is more focussed on alternative treatment approaches and psychosocial interventions, they may be more likely to accept the principles of CM approaches. Furthermore, it has been found that those with lower academic credentials are more likely to accept a larger number of alternative approaches (Stoffelmayr *et al.*, 1999) which may account for the overall mean scores of respondents from the voluntary/community sector.

4.2 Differences in Views of Tangible and Social Incentives

The PSI questionnaire looked at when tangible and social incentives should be used in the treatment process and also compared overall views of participants’ opinions of tangible and social incentive programmes.

4.2.1 When Incentives should be used in the Treatment Process

The results of the PSI found that, overall, respondents disagreed that both tangible and social incentives were only useful at the beginning of the treatment process and that they were only

beneficial if clients were already established in a treatment programme. Participants indicated the use of tangible (37%) and social (43%) incentives would be most beneficial to clients if used throughout the duration of their treatment. However, it was highlighted that in all three questions relating to when incentives would be most beneficial in treatment, over 50% of participants provided a neutral response. This may be indicative of the fact that the majority of the overall sample (82.9%) had no previous experience in using incentive programmes, either tangible or social. Such neutral responses may be reflective of a lack of knowledge, experience and understanding of best practice that individuals working in the substance misuse field have of CM approaches, due to their limited implementation (Weaver *et al.*, 2007) or simply a negative personal opinion on CM approaches and their associated principles.

4.2.2 Tangible versus Social Incentives

Results showed that the overall sample difference in mean responses to unique tangible and social items was significant. Participants responded with higher levels of agreement to social incentives than tangible incentives, therefore showing more positive opinions about this type of incentive programme, which is the same as the findings of Kirby *et al.* (2006) in the American sample.

Possible reasons why sample responses had more positive opinions of social incentives may be related to perceived costs of tangible incentive programmes. Despite the fact that nearly half (47.1%) of the sample indicated that they felt tangible incentive programmes costing £5 per client per month were worth considering, 40.0% still felt that this amount was too costly for their current service to implement. Similar to the findings of Kirby *et al.* (2006), responses showed that as the cost of tangible incentive programmes decreased, the more likely respondents were to agree that these were worth considering and the more likely they were to agree that their service could afford to meet the costs of these programmes. It is possible that participants have more positive views about social incentive programmes as they perceive that this will not be as costly for their treatment facility.

In relation to the unique social items, the Scottish sample showed higher levels of agreement responses for this type of incentive over tangible rewards, with only approximately one-quarter of participants feeling that structured social praise and social reinforcement programmes were likely to become artificial over time, resulting in either the treatment approach becoming ineffective or a negative relationship between client and counsellor. The views of service providers regarding the artificial nature of social praise is particularly interesting when keeping in mind one of the themes that arose from the service user focus group. It was felt that social praise can become “monotonous,” particularly feeling that counsellors can over-utilise social reinforcement when clients are not achieving their targets and that this may affect the relationship the client has with their drug worker. It also emerged that nearly half (44.3%) of the sample felt that the introduction of structured social praise and reinforcement was a useful approach, whether or not therapists were already praising client’s accomplishments. Furthermore, respondents felt that verbal warnings and removal of privileges would not be a more effective treatment approach to achieving abstinence than the use of incentives.

In comparison with the percentage results published by Kirby *et al.* (2006), it emerged that, overall, the Scottish sample, despite being relatively positive with regards to social incentives, did show more concerns over implementation than the American sample.

Although both groups show positive beliefs about the introduction of social incentive programmes, there are some reported concerns that incentive approaches focussing on the use of praise and social reinforcement are not primarily used as a treatment approach due to the limited empirical support for their efficacy in the treatment of substance misuse (Fals-Stewart & Birchler, 2001). This is something that services need to be aware of when implementing a social incentive programme.

4.2.3 Demographic Information for Overall Attitude towards Tangible and Social Incentives

Overall, the results highlight that regardless of group, job position, academic credentials, years working in the addiction field, own recovery status and previous experience of incentive programmes, respondents had more positive opinions towards social incentives than they did towards tangible.

In relation to demographic information, those showing the highest level of overall positive attitude towards tangible incentives were shown to be from the statutory sector, working as Psychologists or Trainee Psychologist, those who held MSc or MPhil qualifications, those who had been working in the addictions field for more than 12 years, individuals describing themselves as being in recovery and finally, those with no prior experience of incentive programmes.

Conversely, those showing the least positive attitudes towards tangible incentives were found to be from the voluntary/community sector, described their job as “other”, held “other addictions certificates”, had been working in the field for more than 7 but less than 12 years, described themselves as not in recovery and had previous experience of incentive programmes.

With regards to overall positive attitudes towards social incentives, those showing most positivity were found to be from the statutory sector, working as Psychologists or Trainee Psychologists, those who held D.Clin.Psychol or PhD level qualifications, had been working in the addictions field for less than 2 years, those who described themselves as in recovery and individuals with no previous experience of incentive programmes.

Those showing the least positive attitudes towards social incentives were shown to be from the voluntary sector, described their job as “other”, held “other addictions certificates”, had been working in the field for more than 12 years, described themselves as not in recovery and had previous experience of incentive programmes.

In looking at the results of the demographic analysis of overall positive attitudes towards tangible and

social incentives, it would have been useful to have uncovered whether those describing their job as “other” had face-to-face contact with drug using clients. The only description provided by such respondents was the title of “family worker”, which does not indicate whether contact is direct or indirect. It may be that if these individual do not work directly with drug using clients, that this may explain their less positive attitudes towards incentives. However without further investigation this can only be speculated upon. Furthermore, it would also have been helpful to have collected information on the specific qualifications of those describing their job position as “other”. Some respondents indicated that their credentials were in the counselling or social care fields, however, since participants in this grouping were shown to have less positive opinions about both tangible and social incentives, it may be worth addressing whether the principles they have been trained in are in conflict with those underlying the incentive-based programmes.

As previously stated, the fact that those individuals showing the most positive opinions towards both tangible and social incentives held postgraduate qualifications, either MSc/MPhil level or above, is in line with the findings of Shipko & Stout (1992), who found that those with higher levels of academic qualifications are more likely to have been trained to take a more creative approach to treatment options. Furthermore, the fact that for both tangible and social incentives, those working within the field of Psychology showed more positive attitudes, may indicate that their training involves being introduced to a large number of psychotherapeutic approaches and particularly within the substance misuse field, approaches based around motivational enhancement (Humphreys *et al.*, 1999).

In contrast with the findings of Stoffelmayr *et al.* (1999), who concluded that those from community backgrounds, who held less academic credentials were more likely to endorse a larger number of treatment approaches, the present study found that those with MSc/MPhil qualifications and above and in particular those who have trained as Psychologists, were shown to have the highest overall positive opinions. It may be that, as previously described, the training that these individuals have undertaken has enabled them to see the benefits of different treatment approaches. Furthermore, as these individuals are most likely to be employed in statutory services, such as the NHS, this may go

some way to explaining why statutory sector participants were shown to have more positive opinions than voluntary sector respondents.

It was also highlighted that those who described themselves as in recovery were more likely to endorse the implementation of incentive-based programmes. It would be interesting if future research looked at this area to determine whether those workers who have previously suffered from substance problems are generally more likely to be accepting of any treatment approach that can be viewed as helping addicted clients, or whether their endorsement is purely towards the principles underlying incentive-based treatments such as CM, as they were more positive about both tangible and social incentives, despite there being nearly 10 times as many respondents who do not describe themselves as in recovery. Similarly, it would be useful to further research the views of those who have previously been involved in incentive-based programmes. It was highlighted that those who had previously utilised this approach held less positive attitudes towards both types of incentives, whilst those who have never been involved in working with either tangible or social rewards were more likely to be positive about their implementation. Uncovering the reasons why those with previous experience are less positive would be useful when trying to implement these treatments in current facilities, as it would allow those making the decisions at a service level to focus on the problematic areas that may be highlighted i.e. poor planning, training, time constraints, to ensure a smooth execution of the approach.

4.3 Comparisons of Parallel Positive and Negative Views from Scotland, United States and Australia

4.3.1 Parallel Positive Opinion Comparisons

Overall, the Scottish sample showed high levels of positive opinions regarding both tangible and social incentives.

In particular, for tangible incentives, the Scottish sample showed the highest positive opinions of all 3 groups on tangible and social questions relating to the usefulness of incentives in rewarding clients for

fulfilling treatment goals, other than providing 'clean' urine samples and the benefit of incentive programmes to focus on what is positive about the client's behaviours. Furthermore, of the 3 samples, Scottish respondents felt most strongly that social incentives were more likely to have positive effects on the client rather than negative effects. Scottish respondents indicated that they were in favour of adding incentive programmes to their current treatment service, with over half agreeing that they would add a tangible approach (52.9%) and over three-quarters agreeing that they would be in favour of adding a structured social approach (75.7%).

In particular, the Scottish sample showed higher agreement responses to the nine positive items, for both tangible and social incentives, compared to the Australian group. This indicates that the Scottish sample held more positive opinions and less concerns about incentive programmes. This is slightly surprising, as given the similar healthcare systems employed by both Scottish and Australian services, with a particular focus on the implementation of harm reduction measures (Ritter & Cameron, 2007), it may have been expected that the agreement results of these 2 samples would have been closer in percentage to each other. Furthermore, it could have been speculated that given the harm reduction focus of these health care services that both these samples would have more positive responses to incentive programmes than the American group. However, one reason that the American sample may have higher agreement responses is that the development of CM programmes and investigations of their efficacy have been carried out in more depth in the United States than in Scotland or Australia (Griffith *et al.*, 2000; Lamb *et al.*, 2004; Kellogg *et al.*, 2005). It is possible that the scores of the Scottish sample may increase in percentage of positive responses to incentive programmes in the future, should further research and development of CM approaches be carried out in Scottish substance abuse treatment facilities.

4.3.2 Parallel Negative Opinion Comparisons

In relation to the 19 negative parallel questions, the Scottish sample responses were similar to those of the Australian sample. It emerged that the Scottish and Australian groups had higher concerns than the American sample, particularly regarding tangible incentives. Of these concerns, the Scottish

sample showed most objections to the fact that incentives do not address the underlying cause of addiction. This was also the strongest recorded objection for both the Australian and American groups, however the Scottish sample showed the highest level of concern. The next strongest objection to tangible incentives in the Scottish sample was that programmes involving urinalysis are too impractical to implement, which was in line with the concerns reported by the Australian group. These groups may differ from the concerns of the American sample as within the Scottish and Australian healthcare system, urinalysis is not as common as it is in American services, some of whom carry out thrice weekly analysis (Griffith *et al.*, 2000). However, research indicates that the efficacy of incentives is reduced as a direct result of less frequent urinalysis, which may hinder the implementation of CM approaches in services that do not routinely carry out this practice (Griffith *et al.*, 2000).

Further concerns raised by the Scottish sample included the possibility that tangible incentives could lead to jealousy amongst clients who do not achieve them, that incentives are a bribe and also that the treatment process may be damaged if clients are only abstinent to receive the rewards. Of these specific concerns to tangible incentives, the Scottish sample showed the highest level of concern.

In relation to social incentives, similar to the main objections to tangible incentives, the Scottish, Australian and American samples had most concerns over the fact that incentives does not address the underlying issues of addiction. Again, the Scottish group showed the highest level of concern regarding this. The next main concern for both the Scottish and Australian samples was the need for frequent urinalysis was too impractical to implement in their services. Both the Scottish and Australian groups highlighted their next highest concern for social incentives was that close tracking of client behaviours was too labour intensive, with the Scottish group showing the highest level of concern. Approximately one-third (34.3%) of the Scottish sample highlighted concerns that the treatment process could be damaged if the client was abstinent only to get their rewards and less than one-quarter (20.0%) felt that social incentive programmes were not consistent with their treatment philosophy.

In looking at the negative opinions of tangible and social incentives, there were a number of items on which the Scottish group showed the least concern of all 3 samples. These included that giving tangible incentives for treatment attendance will not increase attendance, social incentives will have a negative effect on the client-counsellor relationship, social incentives are more likely to have negative effects than positive ones and also that social incentives will cause jealousy. The Scottish sample seemed optimistic about the fact that the introduction of incentives would encourage clients to access treatment services and that these are likely to have positive effects on both the therapeutic relationship and the client's behaviour.

Results of the negative beliefs of the Scottish sample are similar to those reported by the Australian group. Specifically in relation to tangible incentives they shared the same two main concerns: the fact that underlying issues are not addressed and that urinalysis is impractical. In relation to social incentives, the Scottish and Australian group shared the same three main concerns: the fact that underlying issues are not addressed, that urinalysis is impractical and that close monitoring of client behaviour is too labour intensive. Overall, it has emerged that the main concern regarding the use of either tangible or social incentives is that it does not address the underlying issue of addiction, which was shared by the American, Australian and Scottish groups. This finding is interesting in light of the themes that arose from the service user focus group, who felt that the introduction of incentive programmes would result in the individuals other support needs not being met. Focus group participants indicated that they had concerns that service providers would assume that client's success in achieving incentives would negate their need for further psychosocial support, particularly when they felt they were ready to look at the psychological issues surrounding their addiction.

4.4 Service User Views

The service user focus group provided a number of different themes surrounding incentive programmes. The three main themes that arose focussed specifically on the positive effects of social incentives, concerns over potential limitations to incentive programmes and concerns about how incentive programmes would affect current substance misuse services.

4.4.1 Psychological Positives of Social Incentives

Within the over-arching theme of psychological positive of social incentives, three main sub-themes were highlighted: encouragement of self, others and further input; increased self-esteem and the benefits of goal-setting.

Participants stated that the introduction of social incentive programmes would be beneficial by providing encouragement to achieve target behaviours. They felt this was particularly important as they described a lack of previous experience of positive praise or recognition of their achievements. They also believed that incentives such as printed certificates would be useful in encouraging members of their peer group, by showing others that people in similar circumstances had achieved their targets, in turn motivating them to do the same. They also described how social incentives in the form of structured praise could be useful in helping them to break down barriers and accept other forms of input, such as further psychosocial support. Participants described that this form of incentive showed them that they had support and that this was more likely to encourage them to ask for help in other areas.

Participants also discussed how the introduction of social incentives, particularly printed certificates rather than verbal praise, could have an impact upon self-esteem and motivation. They described that these incentives could provide a “boost” when feeling less motivated or when clients believe they have not achieved anything. Participants talked about instances where workers had printed out summaries of clean tests or when they had received group attendance certificates, which they had put on their walls to remind them of their achievements. They discussed feeling a sense of self-worth and belief in their own abilities, which was something they described as rarely feeling whilst trying to manage their substance misuse.

Furthermore, participants felt that the use of setting pre-determined goals in order to obtain the incentive was useful. They described often having no sense of worth or motivation to set themselves life goals and that incentive programmes were beneficial in helping them to set achievable short-term

goals that once obtained could potentially lead to them developing the skills to set longer-term life goals, such as gaining work experience.

In looking at the potential positive psychological effects of incentive programmes, participants felt that these mainly concerned social approaches. They felt that incentive types such as verbal praise and printed certificates were particularly useful in helping them feel encouraged, achieve self-esteem and set future life goals.

4.4.2 Potential Drawbacks of Incentive Programmes

Within the theme of potential drawbacks to incentive programmes, four main sub-themes were highlighted: potential for manipulation or abuse, over-utilisation of incentives, stigma associated with tangible incentives and incentives do not address the other needs of the individual.

Focus group participants felt that due to the chaotic lifestyles that many substance users have, providing individuals with monetary incentives could lead to clients manipulating results, such as urine tests, to gain money or vouchers that can be sold for money.

Participants further felt that the over use of incentives could be detrimental to the progress of the client. In relation to tangible incentives, participants felt that clients could end up “chasing the reward” instead of focussing on achieving their pre-determined goals, therefore only completing goals for the money and not for themselves or their personal progress. In relation to social incentives, participants felt that the over-use of verbal praise by drug workers felt artificial over time. They stated that although praise was good when clients achieve their targets, it often felt that workers tried to find something positive to praise the client about at every visit, even when they had not met their goals. They described feeling that this was “monotonous” and “embarrassing” and had the potential to damage the relationship with the worker.

Other concerns raised by focus group participants included the worry that tangible incentives would increase stigma from the general public towards drug users. They speculated that the public would be against providing drug users with money funded by the NHS and ultimately funded from public taxpayers money. Participants stated that they had concerns over provoking further negative attitudes from the public, as they felt that there was already a stigma associated with drug users being given free NHS treatment.

Furthermore, in looking at the potential drawbacks of incentive programmes, it was felt the introduction of CM approaches could result in a lack of other psychosocial supports being offered. Participants indicated they had concerns that drug workers would view success at achieving incentives as “too positive,” resulting in them believing that the client did not need any further input.

4.4.3 Service Related Concerns

Within the theme of service related concerns, three main sub-themes were highlighted: time spent with drug workers, stage at which incentives were introduced and types of incentives.

In relation to their individual drugs worker, it was felt that there was already an existing inconsistency over which worker clients saw during their visits and how much time they spent with these workers. Participants raised concerns that if CM approaches were implemented in current services, with the same inconsistencies present, positive behaviours and achievement of targets may not be recognised by some staff as they are not the individual’s key-worker. They felt this may result in incentives being forgotten or not given as workers would not be familiar with every client’s targets.

Participants also raised concerns over when incentives would be introduced into the treatment process. They felt that tangible incentives were most useful in encouraging individuals to access the service. However, they further felt that the beginning of treatment was a vulnerable time for substance users and the introduction of a monetary reward may be too tempting for some and result in relapse or continuance of maladaptive behaviours. Participants did acknowledge that verbal praise is

useful at the beginning of treatment as it is something that many people have never experienced before and therefore is likely to encourage them to continue. However, they also felt that constant verbal praise can feel artificial, as discussed in potential drawbacks of incentive programmes.

These concerns led to a discussion about types of incentives provided in CM programmes. Participants felt that the most beneficial incentives were those that could teach skills they may have forgotten or never had the opportunity to develop. They felt that courses which helped to increase their personal skills, such as budgeting and household management, were particularly useful. They also felt a good incentive would be activities enabling individuals to socialise more and combat boredom. These included attendance at outdoor activity programmes, which would provide clients with a social experience and afford them the chance to try something that they otherwise may not the opportunity to experience. Other incentives participants felt would be of benefit to clients were passes, such as gym and travel cards. They felt that these would encourage adaptive and positive behaviours such as exercising and being able to socialise by getting out of the house.

In light of the views of the service users, treatment providers aiming to implement CM approaches need to consider the potential drawbacks described. It is evident from the views of the focus group that CM programmes need to be well structured and tailored to each individual, using the incentives that are most beneficial, are in line with the client's personal preferences and suitable for the individual's stage of abstinence.

From a service user perspective, it emerged that the use of monetary incentives, although useful for enticing people into services, has a number of potential drawbacks. It was felt that this form of reward was most open to manipulation, could result in clients chasing the reward to obtain money and not for the achievement of their goals and furthermore could potentially be detrimental to the client's progress by prompting relapse or re-uptake of maladaptive behaviours. It is clear that services need to carefully consider the implementation of tangible incentives with regards to these concerns. However, participants did offer another tangible alternative in the form of gym passes and travel cards. It was felt that although these may have a monetary value, they are less likely to be sold as

they have a particular benefit to the client. The use of individualised incentives such as passes, or, as described in The Economist (2009), mobile phone top-ups or top-ups such as electricity cards, may be more effective in helping clients achieve targets and further their adaptive behaviours, such as managing their finances. The concerns over the use of monetary incentives may be further alleviated through services utilising variations of random prize-based contingency management (Petry & Martin, 2002). This may alleviate concerns that clients are likely to chase rewards or manipulate results just to obtain incentives, as they have no prior knowledge of what the reward is until their pre-determined targets have been achieved.

4.5 Service Providers' Views versus Service Users' Views

It is evident that service providers and service users have similar hopes and worries regarding the implementation of CM approaches, however there are certain issues that service users highlighted as being particularly concerning about incentive programmes that service providers did not view as potentially problematic.

Positively, the two groups felt that the introduction of incentive programmes would be a beneficial step in addiction treatment services, with both showing more favour towards social incentives. For service providers, social incentives appeared to be less labour intensive for their facility to implement and they showed less concern regarding the potential for manipulation of social incentives, as well as believing that they were less likely to be viewed as a bribe. Service users viewed social incentives as being most likely to motivate people and give people confidence in their own abilities, particularly at the beginning of treatment, during which time they felt that tangible monetary incentives were too big a risk to a vulnerable population. Furthermore, both service providers and service users felt that the use of incentives would encourage people to attend services, in particular, the use of social incentives to motivate individuals and increase client's inner wellbeing.

However, it has also been shown that there are a number of issues service providers do not view as problematic that have been highlighted as particular concerns for service users, such as the artificial

nature of social praise and the potential for tangible benefits being given to vulnerable individual with the intent to sell these and continue drug use.

It was also shown that service providers and service users had similar concerns over the implementation of incentive programmes in current treatment facilities. Both groups indicated that they were apprehensive about introducing incentives as it would not address the underlying reasons why clients were addicted to substances. It appeared that the main worry was that success on the incentive programmes would negate the need for further psychological support and that this would ultimately be detrimental to the client's progress and the therapeutic relationship. Further shared concerns focused on the use of tangible incentives and the potential for these to be manipulated or abused. Both groups indicated that the use of monetary incentives may encourage vulnerable clients to meet targets merely to gain the reward, rather than to achieve something for themselves by focussing on the work required to meet goals. They also felt that tangible incentives could lead to clients trying to achieve goals to gain the money and not to achieve something for themselves, which was a concern that was also highlighted by the service provider group. However, unlike the service providers, they also indicated that the constant use of social incentives, such as praise, would come to feel false if used too often and could harm the therapeutic relationship by breaking down trust and respect.

From the information obtained throughout the present study, it is evident that both service providers and service users view CM approaches as useful additions to the treatment process, but that they do not replace the need for the continuance of other formal psychosocial interventions. It would be beneficial for individual services, planning to implement CM programmes, to recruit both service providers and service user groups in their area to discuss their views on design related issues, such as types of incentives and when to introduce incentives to ensure a cohesive design is implemented that is beneficial to both those providing addiction services and those accessing them.

4.6 Limitations to Study

Despite the present investigation largely replicating studies previously carried out in the United States (Kirby *et al.*, 2006) and Australia (Ritter & Cameron, 2007), there are some limitations specific to the current sample.

The main limitation to the present study is the fact that it focuses on only one Scottish substance misuse locality. The views, both positive and negative, are from service providers who work in statutory and voluntary/community services within Lothian. It would have been useful to access the views of service providers in other areas of Scotland, to identify if there were differences in opinions and experiences of CM. As many of the statutory staff were employed within the same service, it is likely that their experiences of CM programmes would be similar and their views may be more reflective of the service in which they work. However, these opinions may be different for individuals working in other substance misuse services across Scotland. Therefore the extent to which the current sample is representative of all Scottish clinicians' views is not known.

Similarly, the extent to which the conclusions derived from the focus group are representative of all service users' views could have been further validated, as described on p.55, by running subsequent focus groups with service users in different Health Board areas. This would have allowed for individuals who may have encountered different treatments to put forward their views and attitudes to CM based on their own experiences and what services are available to them, in their area. The validity of the focus group themes could also have been strengthened by asking individuals from the SDF's service user involvement group, who had not participated in the focus group, to analyse the transcripts and draw out emerging themes. This would have ensured that the themes uncovered by the researcher and the independent rater matched those of the service users. However, these measures were not pursued in the present study due to time limitations and due to the ethical considerations of accessing service users in other Health Board areas. Further studies into this area would benefit from carrying out these validity measures, in order to extrapolate their findings to the wider service user population.

A further limitation to the present study is the relatively low return rate of PSI questionnaires from the voluntary/community sector. Despite 100 questionnaires being provided to staff in these areas, the number returned was 22, providing a 22% response rate, limiting the potential to obtain broader views from providers in this sector. However, the 22% return rate in the voluntary/community sector in this study is similar to the overall response rate of 19% detailed in the Australian study (Ritter & Cameron, 2007).

A final limitation to the study is the relatively small numbers of views collected in the qualitative focus group. As with the statutory and voluntary/community views, it would have been beneficial to obtain data via running further focus groups. This would have allowed for the possibility of eliciting more views and the emergence of other themes within the data. The use of a single focus group may be viewed as tokenistic in this instance. As previously described, there is little research being carried out looking at the specific area of service user views on the implementation of CM (Weaver *et al.*, 2007), which is something that the present study aimed to initiate.

4.7 Suggestions for Future Research

In looking at the views put forward by both service providers and service users, there are a number of areas that would benefit from future research.

4.7.1 Increasing Access to Service User and General Public Views on CM

In relation to the views of service users on the implementation of CM programmes, it has already been stated that there is a lack of research in this area (Weaver *et al.*, 2007). As such it would be useful for future research to focus on expanding the results found in the present study. As described, for services planning to implement CM approaches it would be beneficial to obtain the views of local service user involvement groups on the type of incentive programmes to introduce in their area.

Future research may also wish to focus on gathering the views of the general public in relation to the introduction of CM approaches in substance misuse services. As was highlighted by the service user focus group in the present study, there is an existing concern over stigma related to the treatment of addicts. It may be useful to access the views of the public to identify if there is current stigma surrounding the treatment of drug users via the NHS and potential objections to the implementation of CM principles.

4.7.2 Pilot Studies of CM in Substance Misuse Services

Taking into account the views documented in the present study, it may be useful for future researchers to develop a pilot CM programme which considers adaptations to its implementation, in relation to the negative opinions service providers hold about CM programmes. For example, the view held by the Scottish sample that CM programmes are impractical due to the need for weekly urinalysis or close tracking of client behaviour, could be assessed to find other ways of ensuring that clients are meeting their pre-determined goals, without the need for urinalysis. This could be done by specifically targeting goals which involve the client changing some other behaviour which can be tracked more easily, such as attendance at groups or appointments.

As described by Kellogg *et al.* (2005), it was not until clinicians, who had initially been resistant to the implementation of CM programmes, began to see changes in clients' behaviours when reinforced with an incentive that they started to value the positive impact that CM practices could have.

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Appendix 1 – Provider Survey of Incentives (PSI)

Survey of Counsellors' Perceptions of Incentive Programs

DO NOT PLACE YOUR NAME OR ANY OTHER PERSONAL IDENTIFIERS ANYWHERE ON THIS FORM
For Office Use Only (to be completed by Researcher prior to administration)

Statutory _____ Voluntary _____

Date: ____ / ____ / ____

Introduction: The goal of this survey is to improve our understanding of what treatment providers think about the use of 'incentives' in treatment. This survey is for use in a research study; we are not proposing to introduce a new incentive program where you work. Incentive programs usually involve giving the client something desirable (e.g., a gift certificate, praise, public acknowledgement of accomplishments) contingent upon the person meeting the therapeutic goal (e.g., negative urinalysis result, attending counselling sessions). Usually the client knows that they can earn these incentives and what they must do get them.

For the purposes of this survey, the word incentives represent the following concepts:

1. Tangible Incentives: These programs offer tangible goods or services to clients who improve their performance by providing a drug-free urine sample, or achieving some other weekly treatment plan goal. The incentives usually are retail items or gift certificates and may range in value from about £1 up to £100.

2. Social Incentives: These programs offer social recognition or special activities to clients who improve their performance by providing a drug-free urine sample, or achieving some other weekly treatment plan goal. The incentives usually involve acknowledging accomplishments (e.g., with printed certificates or compliments) in treatment groups or individually, or it may involve teaching important people in the client's life how to deal with the drug use and be supportive of accomplishments.

**Incentive programs (either tangible of social) are meant to be an add-on to a complete counselling programme.
They are not meant to replace or change the basic treatment programme.**

Please use your experience and opinions to honestly respond to the following questions. Your responses will be completely anonymous.

1. What is your position with this organization – please tick the most appropriate category (only one please).

____ Doctor / Psychiatrist (1) ____ Psychologist/Trainee Psychologist (3) ____ Project support worker (5) ____ Project Manager (7)
____ Addictions Nursing Staff (2) ____ Addictions key-worker (4) ____ Administrative Support (6)
____ Other (8) _____ (please specify)

2. Please check off all of your academic credentials.

____ MD (1) ____ BA , BSc (4) ____ MPharm (7)
____ PhD, D.Clin.Psychol (2) ____ Diploma in Higher Education (5) ____ High School (8)
____ MSc, MPhil (3) ____ Other Certified Addictions Worker (6) ____ Other (9) _____ (please specify)

3. How many years have you worked in the addiction treatment field? _____ Years

4. Are you in recovery from substance addiction? ____ Yes ____ No

5. Have you ever participated in a structured tangible or social incentives program for clients? ____ No ____ Yes If Yes, which type? ____ Tangible ____ Social ____ Both

Appendix 1 – Provider Survey of Incentives (PSI)

Directions - Please indicate how much you agree or disagree with each statement by circling the most appropriate number on the right.

Tangible Incentives	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. If you give a tangible incentive to clients who've earned them, but not to others, it will result in clients arguing about rewards.	1	2	3	4	5
2. Most clients would sell the tangible incentives they receive.	1	2	3	4	5
3. Clients who sell their tangible incentives will use the money to continue their substance abuse.	1	2	3	4	5
4. Tangible incentive programs that cost £100 per client per month are worth it considering how effective they are.	1	2	3	4	5
5. My treatment facility could not find funds for tangible incentives that cost £100 per client per month.	1	2	3	4	5
6. Tangible incentive programs that cost £35 per client per month are worth it considering how effective they are.	1	2	3	4	5
7. My treatment facility could not find funds for tangible incentives that cost £35 per client per month.	1	2	3	4	5
8. Tangible incentive programs that cost £5 per client per month are worth it considering how effective they are.	1	2	3	4	5
9. My treatment facility could not find funds for tangible incentives that cost £5 per client per month.	1	2	3	4	5
10. Tangible incentives are worthwhile because they can get clients in the door for treatment.	1	2	3	4	5
Social Incentives					
11. Giving social praise and social reinforcement in a structured way may become artificial over time, making the incentive program ineffective.	1	2	3	4	5
12. Giving social praise and social reinforcement in a structured way may become artificial over time, resulting in a negative effect on the client-counsellor relationship.	1	2	3	4	5
13. It is not necessary to use structured praise in programs, because therapists already praise accomplishments.	1	2	3	4	5
14. Verbal warnings and removal of privileges are more effective than providing positive incentives in getting clients to achieve abstinence.	1	2	3	4	5
Other Approaches					
15. The incentives approach is inappropriate because it is inconsistent with a 12-step Approach	1	2	3	4	5
16. The 12-step approach is the only proven approach to treating addiction.	1	2	3	4	5

Appendix 1 – Provider Survey of Incentives (PSI)

Directions: For each of the statements below, please circle your level of agreement as the statement applies to Tangible Incentives, and then for Social Incentives.

	Tangible Incentives				Social Incentives			
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Disagree	Disagree	Neutral	Agree
17. Overall, I would be in favour of adding an incentive programme to treatment programme.	1	2	3	4	5	1	2	3
18. If the client is abstinent just to get the incentive, it could hurt the treatment process.	1	2	3	4	5	1	2	3
19. Many clients will see rewards for abstinence as cheesy or artificial.	1	2	3	4	5	1	2	3
20. Incentives are just not right because they are rewarding the client for what he/she should be doing in the first place.	1	2	3	4	5	1	2	3
21. Overall, incentives are good for the client/counsellor relationship.	1	2	3	4	5	1	2	3
22. Overall, incentives have negative effects on the client/counsellor relationship.	1	2	3	4	5	1	2	3
23. Incentives are more likely to have positive effects on the client than they are to have negative effects.	1	2	3	4	5	1	2	3
24. Incentives are more likely to have negative effects on the client than they are to have positive effects.	1	2	3	4	5	1	2	3
25. Incentives will cause jealousy among clients who don't get them.	1	2	3	4	5	1	2	3
26. It wouldn't be right to give incentives to clients for goals such as attendance if they aren't testing drug negative (clean).	1	2	3	4	5	1	2	3
27. It wouldn't be right to give an incentive to someone for being clean when they aren't fulfilling other treatment goals, such as attending a group.	1	2	3	4	5	1	2	3
28. Incentives are useful if they reward clients for fulfilling treatment goals other than just providing a clean urine, such as regular attendance.	1	2	3	4	5	1	2	3
29. Incentive programs that require urinalysis at least once a week are not practical because most programs do not take weekly urines on all clients.	1	2	3	4	5	1	2	3
30. Incentives help clients achieve sobriety, allowing the counsellor to focus on helping them make other life changes.	1	2	3	4	5	1	2	3
31. Incentive programs are not consistent with my philosophy of treatment.	1	2	3	4	5	1	2	3
32. Incentives will stop the client from seeing beyond the external reward and prevent them from realizing their internal motivation.	1	2	3	4	5	1	2	3
33. Incentives are a bribe.	1	2	3	4	5	1	2	3
34. The problem with incentives is that abstinence will only last for as long as the incentives are given.	1	2	3	4	5	1	2	3

Appendix 1 – Provider Survey of Incentives (PSI)

	Tangible Incentives					Social Incentives				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
35. Giving incentives for drug-free urine samples helps the client to become abstinent.	1	2	3	4	5	1	2	3	4	5
36. Giving incentives for treatment attendance will not improve attendance.	1	2	3	4	5	1	2	3	4	5
37. An advantage of incentive programs is that they focus on what is good in the client's behaviour (i.e., the ability to become abstinent), not what went wrong in their recovery.	1	2	3	4	5	1	2	3	4	5
38. Consistently providing the client with incentives is likely to push the client back into denial.	1	2	3	4	5	1	2	3	4	5
39. Incentives are only useful at the beginning of treatment.	1	2	3	4	5	1	2	3	4	5
40. Incentives are only useful after someone is already established in treatment.	1	2	3	4	5	1	2	3	4	5
41. Incentives are most useful if they're used throughout treatment.	1	2	3	4	5	1	2	3	4	5
42. Any source of abstinence motivation, not just internal motivation, is a good thing for treatment.	1	2	3	4	5	1	2	3	4	5
43. Incentive programs that require close tracking of client behaviour are too labour intensive to incorporate into our programme.	1	2	3	4	5	1	2	3	4	5
44. Incentives are not useful for short-term treatments (e.g., one month or less).	1	2	3	4	5	1	2	3	4	5
45. There are enough rewards in being clean; incentives aren't necessary.	1	2	3	4	5	1	2	3	4	5
46. Incentives don't address the underlying issues of addiction.	1	2	3	4	5	1	2	3	4	5
47. Incentives can be useful whether or not they address the underlying issues of addiction.	1	2	3	4	5	1	2	3	4	5

South East Scotland Research Ethics Service

Deaconess House
148 Pleasance
Edinburgh
EH8 9RS
Tel: 0131 536 9067
Fax: 0131 536 9346



Name: Lyndsey McNair
Address:

Date: 23/03/2009
Your Ref:
Our Ref: NR/070815
Enquiries to:
Extension:
Direct Line:
Email:

Dear Lyndsey,

Full title of project: Lothian Substance Misuse Service Providers and Service Users Attitudes on Contingency Management: A Comparison with Australia and US Service Providers

You have sought advice from the South East Scotland Research Ethics Service on the above project. This has been considered by the Scientific Officer and you are advised that, based on the submitted documentation (IRAS application, 09/S1103/13), it does not need NHS ethical review under the terms of the Governance Arrangements for Research Ethics Committees in the UK. The advice is based on the following:

- *The project is an opinion survey seeking the views of NHS staff on service delivery.*
- *The project is an opinion survey seeking the views of NHS staff on a service development*

You may wish to inform local R&D Offices and/or Quality Improvement Teams of your intention to run the project in individual NHS Board areas so that they can give consideration to the need to register with the local R&D office.

Please note that this advice is issued on behalf of the Research Ethics Service and does not constitute a favourable opinion or an endorsement from a Research Ethics Committee. It may be provided to journal editors, conference organisers or others who require evidence of consideration of the need for ethical review prior to publication or presentation of your results. If you wish you may still decide to apply to a REC, but note that a retrospective ethical opinion cannot be given.

You should retain a copy of this letter with your project file as evidence that you have sought advice from the South East Scotland Research Ethics Service.

Yours sincerely,

South East Scotland Research Ethics Service

DIFFERENTIATING AUDIT, SERVICE EVALUATION AND RESEARCH

November 2006

The "Ad Hoc Advisory Group on the Operation of NHS Research Ethics Committees" recommended NRES should develop guidelines to aid researchers and committees in deciding what is appropriate or inappropriate for submission to RECs, and NRES (with the Health Departments and with advice from REC members) has prepared the guidelines in the form of the attached table.

RESEARCH	CLINICAL AUDIT	SERVICE EVALUATION
The attempt to derive generalisable new knowledge including studies that aim to generate hypotheses as well as studies that aim to test them.	Designed and conducted to produce information to inform delivery of best care.	Designed and conducted solely to define or judge current care.
Quantitative research – designed to test a hypothesis. Qualitative research – identifies/explores themes following established methodology.	Designed to answer the question: “Does this service reach a predetermined standard?”	Designed to answer the question: “What standard does this service achieve?”
Addresses clearly defined questions, aims and objectives.	Measures against a standard.	Measures current service without reference to a standard.
Quantitative research -may involve evaluating or comparing interventions, particularly new ones. Qualitative research – usually involves studying how interventions and relationships are experienced.	Involves an intervention in use ONLY. (The choice of treatment is that of the clinician and patient according to guidance, professional standards and/or patient preference.)	Involves an intervention in use ONLY. (The choice of treatment is that of the clinician and patient according to guidance, professional standards and/or patient preference.)
Usually involves collecting data that are additional to those for routine care but may include data collected routinely. May involve treatments, samples or investigations additional to routine care.	Usually involves analysis of existing data but may include administration of simple interview or questionnaire.	Usually involves analysis of existing data but may include administration of simple interview or questionnaire.
Quantitative research - study design may involve allocating patients to intervention groups. Qualitative research uses a clearly defined sampling framework underpinned by conceptual or theoretical justifications.	No allocation to intervention groups: the health care professional and patient have chosen intervention before clinical audit.	No allocation to intervention groups: the health care professional and patient have chosen intervention before service evaluation.
May involve randomisation	No randomisation	No randomisation
ALTHOUGH ANY OF THESE THREE MAY RAISE ETHICAL ISSUES, UNDER CURRENT GUIDANCE:-		
RESEARCH REQUIRES R.E.C. REVIEW	AUDIT DOES NOT REQUIRE R.E.C. REVIEW	SERVICE EVALUATION DOES NOT REQUIRE R.E.C. REVIEW

Focus Group Topic Guide

(Following preamble regarding purposes of research, confidentiality and consent)

Thanks for coming along today. You have all been invited to take part in this discussion group because at some point you have been involved in accessing Substance Misuse Services. You may all have had very different experiences of the services you were provided, but today I want to find out your views on a service called "Contingency Management."

Provide each member with a copy of the "What is Contingency Management" information sheet and read out aloud to group. Ask if there are any questions at this point and clarify anything that is raised.

I want to find out from you what your views and beliefs are about this form of substance misuse intervention. At this time we are not planning to implement this as an intervention in the services you may be involved with.

Prompts:

1. Social Incentives

(a) How do you feel about social incentives, such as praise being used in therapy?

(b) What effect do you think social incentives would have on the client's relationship with keyworkers and therapists?

(c) What do you think about warnings and loss of privileges as a way to motivate clients?

(d) Can you think of any negative consequences to using social incentives?

2. Tangible Incentives

(a) What effects do you think tangible incentives might have amongst your peers?

(b) What do you think about the statement "tangible incentives are likely to be sold for money to buy substances?"

(c) How much do you think tangible incentives need to be, to be beneficial in helping clients reach targets?

(d) Can you think of any negative consequences of using tangible incentives?

3. Incentives in General

(a) In general, what are your feelings about tangible/social incentives?

Further prompts:

(b) How do you think tangible/social incentives will impact upon therapeutic relationships?

(c) What do you feel about the statement “tangible/social incentives will only help people stay clean whilst they are being rewarded?”

(d) How do you feel about tangible/social incentives as a way to encourage abstinence?

(e) How do you feel about tangible/social incentives as a way to increase attendance at services?

(f) What do you feel about tangible/social incentives in the helping to treat the cause of substance misuse?

Stop smoking and get £12.50 a week

SMOKERS have been given a new incentive to give up – £12.50 worth of groceries a week.

If cancer, wrinkles and bad breath are not enough to get you to kick the habit, then the Scottish government's latest offer might just tempt you.

The scheme will target smokers in deprived areas of Dundee, rewarding them with the food at Asda every week if they manage to stay off the fags.

Officials will keep tabs on cigarette intake with regular breath tests, using

By **Kirsteen Paterson**

a gadget which screens carbon monoxide levels. Those who pass the weekly test will be kept in electronic credit cards for up to 12 weeks.

Around 1,800 people are expected to take part in the two-year pilot and health chiefs say they expect half to be successful.

Public health minister Shona Robison claimed the trial could provide a blueprint for anti-tobacco action across

the country. Launching the scheme yesterday, the Dundee East MSP said: 'This is an innovative project and I'll be following the results with interest to see if lessons can be learned for the rest of Scotland.'

It follows the success of a similar project by NHS Tayside, which targeted pregnant women. Paul Ballard, of NHS Tayside, said there are still parts of the community untouched by anti-smoking initiatives.

He said: 'Currently there are 36,000

smokers in disadvantaged areas in Dundee and, although current smoking cessation services are working well, we know we need to do more to tackle this.

'That is why we were keen to work with local communities to find ways which they themselves believe will help them make changes to their health behaviour.'

Smoking is the single biggest cause of cancer in the world and accounts for one in four UK cancer deaths.

R - What if you look at the wee material there on smoking, how do you feel about that?

P6 - I think that's great

P9 - I think it's great, but am coming fae a, a hingmy background, but no everybody that, like 90% of the population are like that encouraging

P8 - there's a big difference between smokin' and using drugs

P6 - no really, well, well

R - it's still an addiction

P8 - it's still an addiction, bit smoking's socially acceptable

P2 - I think it's a good wee goal to choose

P1 - I think the same about that, if I can't give up smoking and me father died of lung cancer, to prevent lung cancer and save ten years off me life, how am I gonnae do it for £12.50? It's the same thing, you know

P6 - see I look at that

P1 - I think exactly the same

P6 - see I look at that and I think tae maself "I'm no ready to stop smoking"

P2 - I think it's quite good

P6 - so the £12.50 isnae

R - means nothing to you

P6 – means nothing, whereas coming off ma meth would be different

P2 - bit you're obviously gonnae want to stop smoking tae dae it, so

P9 - I mean a packet a patches is

P2 – an' I've been thinking about it

P9 - cost £16, so have I, I was supposed tae start on Friday, it was £16 fur wan pack

P4 - see if you go tae a chemist, they gee ye it fur nuthin'

P8 - aye, patches an' aw that, aye.

What is Contingency Management (CM)?

Contingency Management (CM) is a type of treatment used in the substance misuse field. It involves providing clients with rewards for achieving pre-determined goals that they have set with their keyworker or therapist. These rewards are known as "incentives."

Incentives usually involve giving the client something desirable (e.g., a gift certificate, praise, public acknowledgement of accomplishments) contingent upon the person meeting the therapeutic goal (e.g., negative urinalysis result, attending counselling sessions). The client knows that they can earn these incentives and what they must do get them.

Incentives in CM programmes can be either "tangible" or "social."

1. *Tangible Incentives:* These programmes offer goods or services to clients who achieve their goals by providing a drug-free urine sample, or achieving some other weekly treatment goal, such as attending a group, college course or dental clinic. The incentives usually are retail items or gift certificates and may range in value from about £1 up to £100.

2. *Social Incentives:* These programmes offer social recognition or special activities to clients who achieve their goals by providing a drug-free urine sample, or achieving some other weekly treatment goal, such as attending a group, college course or dental clinic. The incentives usually involve acknowledging accomplishments (e.g., with printed certificates or compliments) in treatment groups or individually, or it may involve teaching important people in the client's life how to deal with the drug use and be supportive of accomplishments.

These incentives usually increase in value or frequency with prolonged achievement of the client's goals. This way they can earn more rewards as their treatment continues and receive bigger incentives as they achieve bigger goals.



PSI Participant Information Sheet

You are being invited to take part in a research study. Before you decide whether or not to take part, it is important that you understand why the research is being carried out and what participation will involve. Please read the following information carefully and discuss it with the researcher if you wish.

Take time to decide whether or not you wish to take part.

Study title

Lothian Substance Misuse Service Providers and Service Users Attitudes on Contingency Management: A Comparison with Australian and US Service Providers.

What is the purpose of the study?

The purpose of the study is to assess the views of staff, in both statutory and voluntary sectors, on the introduction of contingency management; providing positive reinforcement through the introduction of clinic privileges, vouchers, redeemable tokens or payment, when clients achieve specified behaviours or treatment goals, e.g. abstinence, negative urine samples or attendance for blood borne virus appointments, in drug misuse services in Lothian. The results of this sample will be compared with data already obtained from Australia and the US.

This will be done by asking participants to complete the Provider Survey of Incentives (PSI) questionnaire (see attached).

Your role in this research would be greatly valued as currently there are limited studies looking at this area, particularly within Scottish drug misuse services. By completing the PSI questionnaire, you will be contributing to increased knowledge about this subject area.

Why have I been chosen?

You have been chosen because the service you are currently working in has been identified as working with clients/patients who are at present, or have previously been using illicit drugs. As such, you are in a position of understanding the current challenges facing drug misuse services and your opinions on programmes, such as contingency management, will be helpful in determining future service implementations.

Do I have to take part?

It is your choice whether or not to take part in the study by completing the PSI questionnaire. If you decide to take part your answers will remain anonymous, even to the researcher.

What will happen to me if I take part?

If you wish to take part in the study, you will be asked to complete a 44 item questionnaire, the PSI, which should take between 10 and 20 minutes to complete. This will remain anonymous and no personal identifiable details will be collected. The study is looking at attitudes of staff in general and not at individual workers or services. This survey is for use in a research study; we are not proposing to introduce a new incentive programme where you work.

Will my taking part on this study be kept confidential?

All responses to the PSI questionnaire will remain anonymous and no identifying information will be presented in the write-up of the study.

What will happen to the results of the research study?

Results of the study will be submitted in a written thesis to the University of Edinburgh as coursework for the degree of Doctorate in Clinical Psychology. It is possible that in the future the results of this research may be published in academic journals or presented at conferences.

If you would like a copy of the results, these can be obtained from the researcher, details below.

Who is organising and funding the research?

This research is part of the coursework which is submitted for the degree of Doctorate in Clinical Psychology at the University of Edinburgh. Expenses are not available for anyone participating in the study and the researcher is not being paid to carry out the investigation.

Who has reviewed the study?

The study has been reviewed by the local ethics committee and the Course Organisation Group of the East of Scotland Clinical Psychology Programme.

Contact for further information?

For further information please contact the researcher: Lyndsey Alexandra McNair, Trainee Clinical Psychologist, Harm Reduction Team, The Spittal Street Centre, 22-24 Spittal Street, Edinburgh, EH3 9DU, Tel: 0131 537 8300.

Thank you for taking the time to read this information sheet.



Focus Group Participant Information Sheet

You are being invited to take part in a research study. Before you decide whether or not to take part, it is important that you understand why the research is being carried out and what participation will involve. Please read the following information carefully and discuss it with the researcher if you wish.

Take time to decide whether or not you wish to take part.

Study title

Lothian Substance Misuse Service Providers and Service Users Attitudes on Contingency Management: A Comparison with Australian and US Service Providers.

What is the purpose of the study?

The purpose of the study is to assess the views of staff, in both statutory and voluntary sectors and the views of a service user involvement group, on contingency management; providing positive reinforcement through the introduction of clinic privileges, vouchers, redeemable tokens or payment, when clients achieve specified behaviours or treatment goals, e.g. abstinence, negative urine samples or attendance for blood borne virus appointments. The results of this sample will be compared with data already obtained from Australia and the US.

This will be done by asking you to attend a one-off hour long focus group discussing contingency management

Your role in this research would be greatly valued as currently there are limited studies looking at this area, particularly within Scottish drug misuse services. By participating in the focus group, you will be contributing to increased knowledge about this subject area.

Why have I been chosen?

You have been chosen because you have been identified as a member of a Scottish-wide service user involvement group for drug misuse services, by the Scottish Drugs Forum. As such, you are in a position of understanding the current challenges facing provision of drug misuse services and your opinions on programmes, such as contingency management, will be helpful in determining future service implementations.

Do I have to take part?

It is your choice whether or not to take part in the focus group. If you decide to take part the discussions will be recorded for the benefit of the researcher, however your personal details will remain anonymous.

What will happen to me if I take part?

The study is looking at attitudes and views of service users. You will be asked to participate in a discussion group, for approximately one hour and asked to comment on some questions regarding the principles of contingency management. The information is for use in a research study; we are not proposing to introduce a new incentive programme in your area.

Will my taking part on this study be kept confidential?

All discussions and comments will be recorded, however your personal details will remain anonymous throughout the study. Any material which has been recorded will be destroyed after the study has finished.

What will happen to the results of the research study?

Results of the study will be submitted in a written thesis to the University of Edinburgh as coursework for the degree of Doctorate in Clinical Psychology. It is possible that in the future the results of this research may be published in academic journals or presented at conferences.

If you would like a copy of the results, these can be obtained from the researcher, details below.

Who is organising and funding the research?

This research is part of the coursework which is submitted for the degree of Doctorate in Clinical Psychology at the University of Edinburgh. Expenses are not available for anyone participating in the study and the researcher is not being paid to carry out the investigation.

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Contact for further information?

For further information please contact the researcher: Lyndsey Alexandra McNair, Trainee Clinical Psychologist, Harm Reduction Team, The Spittal Street Centre, 22-24 Spittal Street, Edinburgh, EH3 9DU, Tel: 0131 537 8300.

Thank you for taking the time to read this information sheet.



Focus Group Participant Consent Form

Please read the following questions and circle the relevant answer.

Have you read the information sheet?

YES NO

Have you been given an opportunity to ask questions and talk about the study?

YES NO

Do you feel happy with the information that you have been given?

YES NO

Do you consent to participating in the focus group?

YES NO

Do you understand that your participation in the focus group is your choice and that you can withdraw at anytime?

YES NO

Do you consent to the information you provide being recorded for the benefit of the researcher?

YES NO

Do you consent to your anonymous data being included in the written thesis?

YES NO

Have you been made aware that the information you provide will be destroyed upon completion of the study?

YES NO

Participant signature:

Date:

Please print name:



The Chief Investigator's declaration

The confidentiality of the above participant will be protected and they will not be identifiable to others who are not already familiar with the circumstances described throughout the research report.

Signed:

Date:

Print Name:

Job Match Agreement

Please look at the following list of United States and Scottish job titles. Try to match up the US jobs with their Scottish counterparts, assuming that those titles you match would perform the same types of work duties.

United States

1. Assistant Counselor
2. Medical Staff
3. Therapist
4. Intake Worker
5. Program Director
6. Administrative Support
7. Program Administrator

Scotland

1. Doctor/Psychiatrist
2. Addictions Nursing Staff
3. Addictions Key-worker
4. Project Support Worker
5. Administrative Support
6. Project Manager
7. Psychologist/Trainee

Please match the numbers of the Scottish job against the US jobs highlighted above.

United States

1. Assistant Counselor
2. Medical Staff
3. Therapist
4. Intake Worker
5. Program Director
6. Administrative Support
7. Program Administrator

Scotland

Thank you for taking the time to complete this exercise.

P3 - you build up trust

P4 - there's two ways of praising, you can praise someone, ye could git a wee diploma, see that anaw, that makes a big difference sometimes than just the verbal praise cause you've got somethin' to show fir whit you've done, d'you know whit I mean

P6 - aye, that's the big thing

P4 - that's a social incentive and it dis make a difference

P8 - that actually works better I think, havin something there rather than jist "aw yer daein brilliant!" Whereas when you get something on paper, you can sit an' look at it an' say "brilliant man!"

P9 - I done a day programme with _____ fur ages and daein' different groups, it wis aw that DiClemente stuff, wi' stages 1 and 2 an' it meant hee haw tae anyone else in the world this stupit wee certificate sayin' _____ done stages a' change group 1 and 2, but tae me when I wis still using an' on methadone it showed that I could turn up everyday for 13 weeks and complete a course. That wee bit a paper did gie me a good wee boost, d'you know whit I mean.

P9 – It's no a doctorate or law or anything like that, but tae me that meant somethin', as you say it's tangible it disnae cost any money it just showed me that if I put ma mind tae somethin' I could dae it and I done the steps tae excellence one anaw.

P4 - yer no gein like money, you don't need that, it's the sense ay achievement

P9 – sense ay achievement, that's it

P8 - even helpin' somebody, like even mebbe an auld person across the road an that

P3 - aye bit whit's the chances ay an auld wummin letting you help them across the road nowadays

P8 – naw I've helped a few people across the road

P3- there thinking aye whit ye wanting

P6- aye like gein them a seat on the bus, a bit a respect

P4 – fae where you've came fae, havin' that letter or whatever, sayin' as _____ says, ye huv completed somthein' you know ye can start somethin', finish it and efter, cause in that kinna life, you start a lot ay things but you don't complete them but noo you've git summit that says you've done it! So if yer havin' a doon day, even jist lookin' at they wee things helps ye, naw whit I mean?

P5 - builds ye up.

P1 - I think it depends like sometimes what stage you're at cause see when I first went on a methadone script, then the praise was great, cause of never had any praise and starting to do something and talking about certificates after having 10 weeks of clean tests me worker printed out all the tests and I had them on me wall and that.

P6 - that's quite good

P1 - after a year the praise was just wearing thin. When I wasn't doing anything and I was still getting praised. I felt like I could go out and kill someone, d'you know and they would still turn around and say "well mebbes you killed someone but d'you know the way you admitted it to the police that was really good" or whatever and I felt that whatever I done, I would still get praise you know off ma support worker.

R - Did you feel that it got a bit artificial over a time?

P8 - it's a bit monotonous, int'it.

P1 - Not artificial, but monotonous but in the end it wasn't encouraging us anywhere because it was praise anything, whatever I done, d'you know.

R - So did they use it too much?

P1 - Aye, aye, definitely

P6 - cause you know yerself, don't ye, when yer, you know yerself a wee bit when yer doin'

P2 - I think when you know when you believe yerself you've actually achieved something, bit when ye hear it fae somebody

P8 - aye it reinforces it

P2 - ye appreciate it

P1 - but if you haven't done something good and you're still getting' praise, that's not good, you know?

P4 - Maist hings thit ye dae, ye dae git some kind of recognition at the end of it, like fae school, even nursery, school and you can even go into like NA (narcotics anonymous) keyrings at certain stages, go to yer detox service ye get yer detox card to certify that you've completed, so it dis work or it widnae be used aw the way through, d'you know whit I mean

P1 - like in NA, if you don't stay clean, you don't get your keyring, at school if you don't pass exams you don't get your school certificate, but with your support worker you don't do fuck all and you still get your little token, you know

P9 - see whit it's tae dae wi' an aw is the way we were brought up in society, when we were brought up in a Western society and we're pre-conditioned as kids, as you jist said we go through school, we git a certificate for leaving school, we dae wur O'levels, we git a certificates fur that, an' we feel good an' it shows us somthin' an we ar' progressing through wur life.

P3 - you build up trust

P4 - there's two ways of praising, you can praise someone, **ye could git a wee diploma, see that anaw, that makes a big difference sometimes than just the verbal praise cause you've got somethin' to show fir whit you've done**, d'you know whit I mean

P6 - aye, that's the big thing

P4 - that's a social incentive and it dis make a difference

P8 - that actually works better I think, havin something there rather than jist "aw yer daein brilliant!" **Whereas when you get something on paper, you can sit an' look at it an' say "brilliant man!"**

P9 - I done a day programme with _____ fur ages and daein' different groups, it wis aw that DiClemente stuff, wi' stages 1 and 2 an' **it meant hee haw tae anyone else in the world this stupit wee certificate sayin' _____ done stages a' change group 1 and 2, but tae me when I wis still using an' on methadone it showed that I could turn up everyday for 13 weeks and complete a course. That wee bit a paper did gie me a good wee boost**, d'you know whit I mean.

P9 – It's no a doctorate or law or anything like that, but tae me that meant somethin', as you say it's tangible it disnae cost any **money it just showed me that if I put ma mind tae somethin' I could dae it** and I done the steps tae excellence one anaw.

P4 - yer no gein like money, you don't need that, **it's the sense ay achievement**

P9 – **sense ay achievement**, that's it

P8 - even helpin' somebody, like even mebbe an auld person across the road an that

P3 - aye bit whit's the chances ay an auld wummin letting you help them across the road nowadays

P8 – naw I've helped a few people across the road

P3- there thinking aye whit ye wanting

P6- aye like gein them a seat on the bus, a bit a respect

P4 – fae where you've came fae, **havin' that letter or whatever**, sayin' as _____ says, **ye huv completed somthein' you know ye can start somethin', finish it and efter, cause in that kinna life, you start a lot ay things but you don't complete them but noo you've git summit that says you've done it! So if yer havin' a doon day, even jist lookin' at they wee things helps ye**, naw whit I mean?

P5 - **builds ye up.**

P1 - I think it depends like sometimes what stage you're at cause see when I first went on a **methadone script**, then the praise was great, cause of never had any praise and starting to do something and **talking about certificates after having 10 weeks of clean tests me worker printed out all the tests and I had them on me wall and that**

P1 - after a year the praise was just wearing thin. When I wasn't doing anything and I was still getting praised. I felt like I could go out and kill someone, d'you know and they would still turn around and say "well mebbes you killed someone but d'you know the way you admitted it to the police that was really good" or whatever and I felt that whatever I done, I would still get praise you know off ma support worker.

R - Did you feel that it got a bit artificial over a time?

P8 - it's a bit monotonous, int'it.

P1 - Not artificial, but monotonous but in the end it wasn't encouraging us anywhere because it was praise anything, whatever I done, d'you know.

R - So did they use it too much?

P1 - Aye, aye, definitely

P6 - cause you know yerself, don't ye, when yer, you know yerself a wee bit when yer doin'

P2 - I think when you know when you believe yerself you've actually achieved something, bit when ye hear it fae somebody

P8 - aye it reinforces it

P2 - ye appreciate it

P1 - but if you haven't done something good and you're still getting' praise, that's not good, you know?

P4 - Maist hings thit ye dae, ye dae git some kind of recognition at the end of it, like fae school, even nursery, school and you can even go into like NA (narcotics anonymous) keyrings at certain stages, go to yer detox service ye get yer detox card to certify that you've completed, so it dis work or it widnae be used aw the way through, d'you know whit I mean

P1 - like in NA, if you don't stay clean, you don't get your keyring, at school if you don't pass exams you don't get your school certificate, but with your support worker you don't do fuck all and you still get your little token, you know

P9 - see whit it's tae dae wi' an aw is the way we were brought up in society, when we were brought up in a Western society and we're pre-conditioned as kids, as you jist said we go through school, we git a certificate for leaving school, we dae wur O'levels, we git a certificates fur that, an' we feel good an' it shows us somthin' an we ar' progressing through wur life.

Key:

Relationship with workers

Over-use of Incentives

Self-esteem

Incentive Types

Social Incentives

Stages of Incentive Use

Sense of Achievement